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PROVISIONAL APPLICATION FOR PATENT COVER SHEET (Small Entity)

This is a request for filing a PROVISIONAL APPLICATION FOR PATENT under 37 CFR 1.53 (c).

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<input type="checkbox"/> Additional inventors are being named on page 2 attached hereto					
TITLE OF THE INVENTION (280 characters max)					
MULTIDISCIPLINARY PROJECT INTEGRATION SYSTEM					
Direct all correspondence to: CORRESPONDENCE ADDRESS					
<input type="checkbox"/> Customer Number		<div>Place Customer Number Bar Code Label here</div>			
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ENCLOSED APPLICATION PARTS (check all that apply)					
<input checked="" type="checkbox"/> Specification	Number of Pages	28		<input checked="" type="checkbox"/> Small Entity Statement	
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Respectfully submitted,

SIGNATURE

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12/28/1999

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MULTIDISCIPLINARY PROJECT INTEGRATION SYSTEM**FIELD OF THE INVENTION**

The present invention relates to the design of aircraft and particularly to methods for fast information flow in large design staffs.

BACKGROUND OF THE INVENTION

Aircraft design is a very complex task which usually requires several years of work by thousands of engineers. Even a simple aircraft comprises many separate systems and subsystems, such as systems for avionics, communications, electricity and hydraulics. All of the systems must be integrated and confined within a given structure, without interfering with each other. Conventionally, however, each system is planned separately by different engineers using different design tools. The interaction between the different tools is a major problem in the aircraft planning industry. In addition, it is necessary to coordinate between project, design, manufacture and procurement engineers. For example, a design engineer may design an aircraft based on production methods which are non-existent or too expensive.

Each engineer usually plans the system on which he/she is in charge without relation to other systems of the aircraft. A department or project manager finds problems in the integration of the plans of all the engineers in the department and orders the engineers involved in each integration problem to resolve the problem. Usually, this process is repeated a few times for increasing levels of integration. This process is time consuming and wasteful.

It is customary in the aircraft industry to have workers from different departments, such as design, maintenance, procurement and production workers, work in adjacent rooms such that they can receive information from each other. However, this is usually helpful only for general information and not for specific details of a project, since the details of the project are generally distributed between thousands of workers.

Product Data Management (PDM) systems are used to bridge the information gap between design and manufacturing during the release and configuration management phase of a product development process. In a PDM system, a product is described using an item tree which depicts the structure of the product. The PDM system stores, for each item, documents relating to the item. In order to find a document relating to an item, a worker searches down the item tree to the desired item. In the tree, the elements of each system are located on different branches of the tree. Some PDM systems are integrated with enterprise resource planning (ERP) systems. Usually implementing the use of a PDM system within an organization requires drastically changing the work patterns of all of the workers in the organization.

Some CAD tools, described for example in "CAD software integration", Aerospace Engineering, March 1999, the disclosure of which is incorporated herein by reference, are directed to integrated product development. For example, an article in "Aviation Week & Space Technology" from June 3, 1991, describes a computerized design system for airplanes. The system, named Computer Aided Three-dimensional Interactive Application (CATIA), stores all the plans of an airplane in a single system allowing substantially concurrent access to the plans to engineers from different departments. Each part is tagged in the computer file with the name and telephone number of the person responsible for the part. Thus, when an engineer wishes to perform changes to the plans he/she may easily determine who to talk to.

The PDM and CATIA systems, however, are very sophisticated and costly, and include enormous amounts of information which may "flood" the user. The use of each of these systems generally requires lengthy training of the workers. Usually, each user relates only to that part of the database which relates to the user's department. Furthermore, in many cases workers are not allowed to view information of other departments, in order to prevent free flow of confidential information. Even if the user receives permission to view information of other departments, he/she may not know where exactly to look. The CATIA system must be run on expensive work stations which can handle three dimension graphical data.

In many industries, a part number identifies substantially each item of a product. If the item appears in several locations, the same part number is assigned to the part in all the locations. The part numbers are commonly used to identify items on drawings and/or CAD programs. In the aircraft industry the part numbers usually have the following form: "xxxyyyzzzz", in which xxx identifies the project, yyy is a three digit number assigned by Configuration Management to the various systems or parts of the product and zzzz designates a number of the product within the system identified by yyy. Sub-parts of an item are marked using the part number of the item with a suffix identifying the sub part.

Codes which identify elements according to their location and/or functionality, such that if the same element appears in several locations each element is given a different code, exist in some systems of aircrafts. For example, an interface standard referred to as MIL-W-5088, the disclosure of which is incorporated herein by reference, describes codes for wiring aerospace vehicles. The codes in this standard reflect the functions of the wires, their size and the unit in which the wires are included. These codes are usually imprinted on the wires, such that during production and/or maintenance it is easy to determine the purpose of a specific wire.

In many companies project management is performed using a Work Breakdown

Structure (WBS) which defines a product being developed. A responsibility assignment matrix is used to state who performs each task in the WBS. The RAM and WBS are described, for example, in <http://nnh.com/ev/> available in November 1999, the disclosure of which is incorporated herein by reference.

SUMMARY OF THE INVENTION

5 An aspect of some preferred embodiments of the invention relates to an object oriented database which describes an aerospace vehicle. For each major element of the vehicle, the database includes information on the integration of the element within the vehicle and references to humans and documents related to the element. Thus, the database serves as an
10 index to the planned vehicle. Preferably, the database includes mainly information which is of interest to several workers from different departments. Preferably, the database does not include drawings and diagrams which require large amounts of storage and are usually of little interest to workers not in the department in charge of the elements described by the drawings.

15 Preferably, the major elements included in the database are those elements which interact with other elements of the vehicle. Alternatively or additionally, the major elements are elements which appear on maps and/or wire diagrams of the vehicle. Further alternatively or additionally, the major elements are those elements which are handled by a plurality of personnel from different departments. The major elements generally do not include minor elements, such as bolts, nuts and rivets. Thus, the major elements usually account for less than
20 ten percent, even less than one percent, of the elements in an aircraft.

In some preferred embodiments of the present invention, the information on the integration of an element in the vehicle comprises the physical location of the element, the functionality of the element and/or the access paths to the element. Preferably, each record of an element references other elements which are related functionally or are located next to the
25 element. In a preferred embodiment of the present invention, the elements references are interconnected using hypertext links.

The references to documents preferably include references to all the drawings, documents, letters, route cards, etc., related to each major element. In some preferred embodiments of the invention, the database includes links to the documents. When a user of
30 the database actuates such a link, a different software carrying the document is opened so that the document may be viewed by the user. It is noted that the opening of the document depends on whether the user has authorization to view the document.

The references to humans in charge of an element are preferably stated by a job designation code which is in a format similar to element codes. Thus, when people change

positions there is no need to change the references of a plurality of element records. Furthermore, the job designation code is preferably easily derived from the elements handled by the worker in the designated position.

5 Preferably, the database is of a small size which may fit on substantially any portable computer. Thus, a copy of the database may be taken, for example, to field tests and/or maintenance tasks. In addition, information from the database and even the entire database may be transferred within minutes over slow communication wires. Thus, a copy of the database may reside on a plurality of computers for the convenience of the workers.

10 In a preferred embodiment of the present invention, the database does not include confidential material which should not be viewed by some of the workers within an organization. As the database serves as an index for workers who wish to receive information about issues not within their responsibility it is preferable that all the information be open to any worker.

15 An aspect of some preferred embodiments of the present invention relates to running verification routines on a reduced size database which describes a complex project. In a preferred embodiment of the present invention, the reduced size database does not include drawings. Alternatively or additionally, the database carries information substantially only on the major elements of the project. Verification routines for a reduced size database are simpler and run much faster than routines run on very large databases. Therefore, verification routines
20 may be run more frequently according to project requirements on a reduced size database.

An aspect of some preferred embodiments of the present invention relates to a method of marking elements on drawings, databases and/or on the elements themselves. The elements are marked using codes which relate to the functions and/or locations of the elements, and are selected in a single scheme for an entire vehicle. Thus, immediately upon reading the code, an
25 engineer knows which element is identified by the code, and what is the purpose of the element. The identified elements may include parts, or assemblies of parts that are closely related. Alternatively or additionally, the identified parts comprise connectors of parts, such as wire connectors, and rod edges. Thus, a single element may carry several codes.

30 Preferably, the codes indicate the system and sub-system to which the elements belong, as well as numbers for identifying the element within the sub-system. Connections are preferably identified in addition according to the type of the connection.

There is therefore provided in accordance with a preferred embodiment of the present invention, a vehicle design database system, including a plurality of records which relate substantially only to major elements of a designed vehicle, at least one indication of the

relative assembly of the major elements, a plurality of references to workers in charge of the major elements, and a plurality of references to documents related to the major elements.

Preferably, the plurality of records include a record for each of the major elements of the aircraft, and the major elements include elements which interact with other elements of the vehicle.

Preferably, the at least one indication of the relative assembly includes an indication in each record of the major elements which are functionally related to the element described by the record. Alternatively or additionally, the at least one indication of the relative assembly includes an indication in each record of the coordinates in the vehicles framework of the element described by the record. Preferably, the at least one indication of the relative assembly includes an indication for at least one of the major elements of an access door of the element and/or of a compartment in which the element is located. Preferably, the at least one indication of the relative assembly includes an indication in each record of the major elements with which the element interacts.

Preferably, the database substantially does not include drawings. Further preferably, the database requires less than 1Gbytes of storage space, more preferably less than 100Mbytes of storage space. Preferably, the database includes records for less than 10% of the elements of the vehicle. Further preferably, the database includes records for less than 1% of the elements of the vehicle.

Preferably, the references to the documents include hypertext links. Preferably, the documents include diagrams including the elements and/or procurement invoices of the elements. Preferably, each of the elements is identified by a unique code which is assigned according to the functionality of the element. Preferably, the database is associated with at least one computerized tool such that an update of information in the at least one computerized tool automatically updates the database. Preferably, the database is accessible over a network which connects a plurality of remote processors. Alternatively or additionally, the database is stored on a portable computer. Preferably, the database includes input and output information of at least one data evaluation program molded into the form of the database. Preferably, the at least one data evaluation program includes a design to cost program and/or a design for manufacture and assembly program.

There is further provided in accordance with a preferred embodiment of the present invention, a method of forming a vehicle design index, including automatically gathering from a plurality of computerized tools, information on substantially all the major elements of a vehicle, and storing the information in the index.

Preferably, gathering the information includes gathering location and/or interconnection information of the major elements. Preferably, gathering the information includes gathering references to documents describing the major elements.

Preferably, a company designing the vehicle includes at least one group of workers which are restricted from viewing information relating to the vehicle and gathering the information includes gathering information which is not restricted for viewing by substantially any of the workers of the company.

Preferably, gathering the information includes gathering from tools which carry information restricted for viewing within the company designing the vehicle. Preferably, storing the information includes storing the information in a database.

In a preferred embodiment, gathering the information includes gathering information on elements of an aircraft. Preferably, automatically gathering the information includes automatically gathering the information periodically.

There is further provided in accordance with a preferred embodiment of the present invention, a method of providing information between workers designing a vehicle, including gathering, for each of a plurality of major elements of the vehicle, information regarding the element, including a plurality of different indications of the relative assembly of the element, and a plurality of references to workers in charge of the element, storing the gathered information in a database, and searching the database for data on one or more major elements. Preferably, gathering the information includes gathering references to documents related to the major elements.

Preferably, the plurality of different indications of the relative assembly of the element include at least one indication of the location of the element. Preferably, the at least one indication of the location of the element includes an indication of the coordinates of the element within the vehicle. Alternatively or additionally, the at least one indication of the location of the element includes an indication of an access door to the element within the vehicle. Further alternatively or additionally, the at least one indication of the location of the element includes an indication of a compartment in which the element is located.

Preferably, the plurality of different indications of the relative assembly of the element include a list of the major elements with which the element is connected and/or an indication of a system to which the element belongs.

Preferably, the indication of the system to which the element belongs includes an indication of the relative function of the element within the system. Preferably, the method includes running a verification routine which finds design faults, on the database. Preferably,

running the verification routine includes running a routine which checks for elements which are distanced from each other less than a minimal allowed distance.

Preferably, storing the gathered information in the database includes storing the information in a database which does not include diagrams or drawings.

5 There is further provided in accordance with a preferred embodiment of the present invention, an aircraft designed using any of the above described methods of distributing information.

10 There is further provided in accordance with a preferred embodiment of the present invention, a method of labeling major elements of an aircraft, including determining for each major element the system to which the element belongs, and assigning each of the major elements with a code which is unique to each occurrence of the element, responsive to the system to which the element belongs.

15 Preferably, the major elements include elements belonging to the structure of the aircraft. Preferably, assigning the code includes assigning a code having at least three digits in common with the digits of a part number of the element, for substantially all the major elements of the aircraft. Alternatively or additionally, assigning the code includes assigning a plurality of codes to at least one single element. Preferably, the plurality of codes assigned to a single element include codes which represent connections of the element.

20 There is further provided in accordance with a preferred embodiment of the present invention, a method of referencing workers working on an aircraft, including assigning configuration management codes to various aspects of the aircraft, assigning each of the parts of the aircraft, a part number code which includes the assigned configuration management code of the aspect to which the part number belongs, and assigning worker codes which include the configuration management code of the aspect on which the worker works.
25 Preferably, the configuration management codes include three digits. Preferably, the method includes preparing a responsibility matrix which references workers by the assigned worker codes.

BRIEF DESCRIPTION OF THE DRAWINGS

30 The invention will be more clearly understood by reference to the following description of preferred embodiments thereof in conjunction with the figures, wherein identical structures, elements or parts which appear in more than one figure are labeled with the same or similar numeral in all the figures in which they appear, in which:

Fig. 1 is a schematic block diagram of a working environment in an aircraft design company, in accordance with a preferred embodiment of the present invention;

Fig. 2 is a flow chart of actions performed using an aircraft index database, in accordance with a preferred embodiment of the present invention;

Fig. 3 is a schematic block diagram of the internal structure of an aircraft index database, in accordance with a preferred embodiment of the present invention;

5 Fig. 4 is a schematic illustration of a uniform MRD code structure, in accordance with a preferred embodiment of the present invention;

Fig. 5 is a flow chart of the actions performed by an engineer desiring to perform a change in the design of an aircraft, in accordance with a preferred embodiment of the present invention; and

10 Fig. 6 is a schematic illustration of a responsibility assignment matrix (RAM), in accordance with a preferred embodiment of the present invention.

DETAILED DESCRIPTION OF PREFERRED EMBODIMENTS

Fig. 1 is a schematic block diagram of a working environment 10 in an aircraft design company, in accordance with a preferred embodiment of the present invention. A plurality of
15 workers (represented generally by 30), organized in a plurality of departments, design and/or manufacture different systems of an aircraft. Usually the number of workers 30 is of the order of thousands or more. Workers 30 preferably include engineers 34 of various tasks, such as engineers of specific systems (e.g., hydraulics, avionics, electricity), and integration engineers (e.g., safety regulations and simulations). Workers 30 preferably also include project
20 engineers/managers 32, production personnel 36, procurement personnel 38, and/or other workers. Most of workers 30 preferably use computerized tools 40, such as CAD 40A and CAM 40L tools, word processors and other office tools 40D, project planning tools 40E, accounting tools, a product data management (PDM) system 40B, an enterprise resource planning (ERP) system 40G, and a components and supplier management (CSM) system 40F, which are fitted to specific tasks performed by the respective workers. The number of separate
25 tools 40 may be of the order of hundreds and many of the tools require lengthy training of the workers 30 using them.

A database 20 preferably serves as an index to the aircraft being designed and/or manufactured in working environment 10. Database 20 is preferably of a small size allowing
30 easy download and transfer of the database. In a preferred embodiment of the invention, the database requires less than 100 Mbytes of data, more preferably less than 50 Mbytes. In a preferred embodiment of the invention, database 20 comprises only text information and does not include drawings and maps which require large amounts of storage space. It is noted that the information included in drawings is usually highly technical and is usually not of interest

to workers other than the worker in charge of the drawing.

Preferably, each of workers 30 has access to database 20 and may query the database for necessary information which is not related to the worker's department. In a preferred embodiment of the present invention, a plurality of copies of database 20 are available throughout environment 10 on a plurality of computers and updates are distributed periodically (e.g., hourly, daily, weekly). Alternatively, database 20 is located on a single server, and workers may access the database through a local area network, a dial-up link, and/or a wide area network.

Database 20 preferably comprises records for substantially all of the major elements of the designed aircraft. Database 20 describes the relations between the various elements and includes references to documents and workers related to the elements. The relations between the elements preferably include one or more of the functionalities of the elements, cross connections between elements and/or the locations of the elements. The functionalities of an element preferably include the systems and/or sub-systems to which the element belongs. The cross connections preferably refer for each element to the elements to which the element is connected, the sub-elements included in the element and/or an element in which the element is included. Preferably, the relations between the elements in database 20 are according to a plurality of different categorizations. It is noted that a prior art DPM system generally does not include cross connections and the data on each element in the DPM system is found in a specific position of a product tree.

In a preferred embodiment of the invention, database 20 includes only general information about the designed aircraft, which information is not considered secret or restricted in viewing by substantially any of workers 30.

Fig. 2 is a flow chart of actions performed on database 20 in aiding the design of an aircraft, in accordance with a preferred embodiment of the present invention. During an early stage of design, in which a project definition, an engineering preliminary design and a production technology are formulated, the information on the structure of the aircraft is entered (50) into database 20. Preferably, each design engineer 34 enters the structure information to which he/she is responsible. Further preferably, other information is entered by workers 30 for which they are responsible. Alternatively, during the early design, the information is entered centrally by a single department. In some preferred embodiments, some or all of the information is entered automatically from CAD/CAM planning tools (40A, 40L) and/or from other design tools 40, for example, using routines for data extraction from the tools 40 to database 20.

Preferably, during the preliminary design a project manager initiates rules which determine which elements are considered major elements for the specific project and which elements are considered minor elements. According to these rules the information on the major elements is entered to the database. At a later time, minor elements which turn into major
5 elements may preferably be entered into the database. Similarly, elements may be removed from the database if they are altogether unnecessary or if they become minor elements.

Thereafter, workers 30 continuously update (52) the information in database 20 with respect to changes in the relationship between the major elements. In a preferred embodiment of the present invention, automatic routines 26 which extract information from tools 40 and
10 place it in database 20, are run periodically on some are all of computerized tools 40.

In addition, for each new document which relates to one or more major elements of the aircraft, references which direct interested workers 30 to the document are preferably added
15 (53) to database 20. For example, in a preferred embodiment, a word processor used in preparing documents asks users to list the elements to which the document relates. An automatic agent adds a reference to the new document to the records in database 20 of the listed elements.

In some preferred embodiments of the invention, some of the information in the referenced documents is entered to database 20. Preferably, the entered information is information which is commonly used and/or is information which interests workers other than
20 those directly working on the element to which the information pertains. Alternatively or additionally, the entered information comprises information which is used by verification routines 28 run on database 20 to determine planning hazards.

During later stages of planning, when a worker 30 is interested in information from other departments, the engineer may receive the information or initial information about where
25 to look and who to go to, by querying (54) database 20. Preferably, substantially all the information is open for viewing by all of workers 30. On the other hand, changes to the database preferably require specific authorization which is given to those workers responsible for the data being changed.

Preferably, one or more verification routines 28 are periodically run on database 20, to
30 check (55) for planning hazards. Alternatively or additionally, verification routines 28 are run responsive of changes of at least a predetermined extent to database 20. The hazards may include, for example, having less than a minimal critical distance between elements which may interfere with each other, having unbalanced weight of the aircraft and/or exceeding a monetary budget of the aircraft. Verification routines 28 preferably further include routines

which determine the feasibility of the aircraft design for production, procurement and/or maintenance. For example, a verification routine preferably reviews each access door of the aircraft verifying that accessing all of the elements listed as being accessed through the access door is feasible.

5 Alternatively or additionally, the information in database 20 is exported to an external standard program which performs verification and analysis tasks, such as design-to-cost 40H and design for manufacture and assembly (DFMA) programs 40C. In a preferred embodiment of the invention, the results from the external standard program are returned to database 20 and are placed in the database in a structural form of the database. Preferably, the results from
10 external programs which provide estimated data are compared at later times to actual data accumulated by database 20. For example, a routine running on database 20 preferably compares the results from a design-to-cost program to actual costs entered at a later time to the database.

15 It is noted that finding hazards by a computerized routine does not require drawings of the elements, and is much simpler without the drawings. Location information, as described hereinbelow, is usually sufficient for identifying potential planning hazards. In a preferred embodiment of the invention, one or more of the verification routines point out potential hazards, and a human worker determines whether the hazard is an actual hazard. Alternatively or additionally, an artificial intelligence program is run on database 20 searching for potential
20 hazards.

Thus, the use of database 20 begins at early design stages of the aircraft and continues until post production stages, preferably including maintenance at a client purchasing the aircraft. At early design stages, database 20 simplifies the communication between workers from different departments, allowing real time feedback on the integration of different systems
25 being designed. Preferably, the design of each system (e.g. hydraulic, electric) is continuously entered to database 20 allowing workers designing other systems to relate to the design of the system before changes become expensive and problematic.

Concurrently, and at more progressive design stages, database 20 serves as a communication tool between workers of different tasks, e.g., design engineers, project
30 managers, and procurement and production personnel.

Sales engineers preferably also use database 20 in determining whether the aircraft fits the desires of the clients and/or to enter client requests. Such client requests are entered in the description of the system to which they relate such that the requests reach the relevant workers immediately. It is noted that database 20 is especially suited for loading onto portable

computers which serve sales engineers, due to the small size of the database.

During maintenance of existing aircrafts, database 20 is preferably used by maintenance personnel to better understand the relationships between the elements of the aircraft. In a preferred embodiment of the present invention, database 20 is available on a wide area network, such as the Internet. Maintenance personnel from various airline companies can use an on-line version of database 20 to receive information on various elements. In a preferred embodiment of the present invention, the on-line version of database 20 serves as a discussion group through which maintenance workers from various companies exchange information.

Preferably, the precise data included in database 20 depends on the stage of the project described by the database. For example, the on-line version of database 20 which may be viewed by workers outside of an aircraft design company managing database 20, may include less information than a version which may be viewed only by workers of the aircraft design company.

Fig. 3 is a schematic block diagram of the internal structure of database 20, in accordance with a preferred embodiment of the present invention. Database 20 comprises an assembly table 70 which describes the relationship between the major elements of the designed aircrafts of the project. Assembly table 70 preferably lists for each major element of the designed aircraft, a map reference designator (MRD) code, a part number of the element, a location of the element and references to workers 30 responsible for various aspects of the element.

In some preferred embodiments of the invention, database 20 is used to describe a plurality of aircrafts, with minor variations, belonging to a single project. Each record describing an element in assembly table 70 is preferably associated with a field which states the numbers of the aircrafts to which the record relates.

The MRD code preferably identifies the elements according to their functionality and/or their interconnection in the aircraft. Alternatively or additionally, the MRD code is related to the location of the element in the aircraft. It is noted that if the same element appears in several locations, each element is given a different MRD code, although the elements have the same part number. The term major element refers herein to any major assembly, part, or structure which is important enough to be included in database 20. Such major elements are preferably elements which interact with other elements of the aircraft. Alternatively or additionally, the major elements are elements which appear on assembly maps and/or wire diagrams. Further alternatively or additionally, the major elements are those elements which

are handled by a plurality of personnel from different departments.

The location of each element is preferably stated in a three-dimensional coordinate system of the aircraft. Preferably, the coordinates of the element are the coordinates of the center of mass of the element. Alternatively or additionally, the coordinates are of an envelope encompassing the element. In a preferred embodiment of the present invention, the coordinates of each element are stated in more than one coordinate system of the aircraft. In a preferred embodiment, the location information also states the compartment of the aircraft in which the element is located according to any predetermined compartment division, such as the ATA 100 regulation division. Preferably, assembly table 70 also states the access door (bay) for maintenance of each element, for example using the ATA 100 standard. Alternatively or additionally, the compartment and/or the access door of the elements are considered related to the functionality of the element and are stated in MRD table 74 described hereinbelow or in one or more of its related tables 76.

Preferably, the listing of workers 30 responsible for the elements includes a supervisor of the element, a project engineer and/or manager of the element and a subcontractor related to the element. Alternatively or additionally, the worker listing includes all the engineers related to the element including, for example, engineers responsible for design, for critical parts, for weight and balance, for ground and flight tests, for production, for tools, and/or for procurement. In a preferred embodiment of the present invention, database 20 shows the hierarchy of the workers related to the element.

In a preferred embodiment of the present invention, the engineers are identified in database 20 according to their job descriptions. Preferably, each responsibility task of an engineer is assigned an engineer code which is used in table 70, and preferably throughout database 20, to identify engineers related to elements. It is noted, that a single engineer may perform several tasks and is therefore assigned several engineer codes. Alternatively or additionally, a single engineer code may refer to several engineers who perform the task together.

Preferably, a table 82 in database 20 associates the engineer codes with information relating to the engineers, such as employee ID, telephone number, address, department, etc. If the engineer in charge of a specific task is replaced during a project only a single record in table 82 needs to be replaced.

Preferably, a standard code scheme is used in assigning the codes. In a preferred embodiment of the invention, engineer codes of workers in the same department and/or workers and their managers have similar codes. The engineer codes are preferably formulated

using common elements with the part numbers and/or the MRD codes. Thus, the code of an engineer is closely related to the part numbers and/or MRD codes of the elements for which he/she is responsible. In a preferred embodiment of the invention, the engineer code comprises the three digits of configuration management together with one or more additional letters and/or digits.

An MRD table 74 preferably states for each element, based on the MRD code, references to information relating to the element. The references preferably relate to the functionality of the elements and/or the interconnections of the elements within the aircraft. In a preferred embodiment of the invention, MRD table 74 states for each element, the sub-elements included in the element, the parent element to which the element belongs, and/or the elements with which the element interconnects. Alternatively or additionally, MRD table 74 states for each element, the functionality of the element including an indication of the system to which the element belongs. Preferably, the system indication is stated in a nested form of system, sub-system and the sub-systems of the sub-systems. In a preferred embodiment of the invention, each element is identified by at least three levels of system, sub-system and sub-sub-system.

In a preferred embodiment of the invention, MRD table 74 includes references to one or more documents that describe the element and/or to additional tables 76 of database 20 which carry information related to the element.

In a manner similar to MRD table 74, a part number table 72 states references to information which depends on the part number of the element, i.e., are not related to the location of the element within the aircraft. As with MRD table 74, the references preferably relate to documents describing the element and/or additional tables 78 of database 20 which carry information related to the element. Preferably, part number table 72 is organized in a manner similar to part number tables known in the art.

Preferably, the document references state the locations of the documents in a manner which allows easy retrieval of the documents. In a preferred embodiment of the invention, database 20 comprises a table 80 which lists for each document the location of the document as well as other information, such as the versions and sizes of the documents. The documents may be of any type known in the art, including reports (e.g., flight and ground test reports, technical reports), route cards (e.g., production route cards), action item lists, procurement invoices, advanced material orders, design criteria documents, federal aviation regulations, drawings, system maps, and/or wire diagrams. The documents listed in table 80 preferably comprise both paper and computer stored documents.

In some preferred embodiments of the invention, the references to computerized documents include links to the documents. Preferably, actuating the link causes the document to be displayed on a computer screen before the user. Preferably, actuating the link opens the document using a software with which the document is associated.

5 In a preferred embodiment of the invention, tables 76 list for each element, based on the MRD code, information regarding properties of the element which are related to the relationship between the element and other elements. Such properties preferably include the grounding of the element, an action item list of the element, penetration information of the element (e.g., locations of holes in the element for pipes or tooling), aviation regulations
10 pertaining to the element, design criteria related to the element, an advanced material order related to the element, failure listings of the element, environmental conditions of the element (e.g., surrounding temperature and pressure), a line replacement unit (LRU) of the element, and/or critical parts of the element.

15 Preferably, a table 76 includes for each element an action item list for the element. The action item list includes listings of actions related to the element which need to be performed and/or which were performed. The action item list can serve as an easy tool for passing messages related to an element between all the workers 30 who deal with the element.

20 In addition, the action item list can serve as an on line documentation of the history of the element, which list can be used by a worker beginning to work on the element to quickly determine what has been done with the element. Including the action item lists within database 20 which includes cross references to substantially all the major elements of the designed aircraft allows quick finding of the action item list and easy reference to information other elements related to actions listed in the list.

25 In a preferred embodiment of the invention, tables 78 list for each element, properties of the structure of the element which are not related to the relationship of the element with other elements. Tables 78 are preferably organized using the part numbers of the elements. The properties listed in tables 78 preferably include the size and weight (target and/or actual) of the element, the material composition of the element, its natural vibration frequencies and/or its dynamics. Alternatively or additionally, tables 78 include a production technology of the
30 element, references to tools and jigs used in producing the element, and/or other production or procurement information related to the element.

Preferably, the information in tables 76 and 78 is also available in the documents referenced by database 20 in relation to the element. Preferably, as described above, the information included in tables 76 and 78 is chosen based on the frequency of use of the

information, and the amount of workers needing the information. Preferably, the amount of information included in tables 76 and 78 is not too large which may make database 20 cumbersome. In addition, tables 76 and 78 preferably do not include information which has restricted viewing.

5 Database 20 preferably includes other tables which elaborate on information in tables 70, 72, 74, 76 and 78. In a preferred embodiment of the invention, database 20 comprises a location table 84 which provides details on the compartments and doors used in describing the locations of the elements. A tool table 86 preferably describes information related to tools used in design and manufacture of the aircraft. A company table 88 preferably provides details on
10 suppliers, manufacturers and/or other companies with which workers 30 are in contact.

In some preferred embodiments of the invention, database 20 comprises one or more verification tables 90 which are used by verification routines 28 in determining hazards in the aircraft design. Verification tables 90 preferably include a table which lists the minimal required distances between different types of elements (e.g., moving elements, elements which
15 generate magnetic fields).

In some preferred embodiments of the invention, one or more of the above described tables are separated to a plurality of tables, for convenience of the internal structure of database 20. Alternatively or additionally, a plurality of the above described tables are combined into a single table.

20 Fig. 4 is a schematic illustration of a uniform MRD code structure 100, in accordance with a preferred embodiment of the present invention. Code structure 100 is preferably a global structure which covers all the major elements of an aircraft using a uniform set of rules. In a preferred embodiment of the present invention, code structure 100 is based on known coding schemes from the aircraft industry. For example, symbols used in part numbers and/or
25 in wire labeling are preferably used in code structure 100. It is noted that workers 30 from different countries are used to different symbols. Therefore, different code structures are preferably used by different companies. For example, American and European companies use different methods to designate the various sections of an aircraft. Therefore, in a preferred embodiment of the invention, the codes used by Americans may be different than codes use by
30 Europeans. In a preferred embodiment of the present invention, database 20 includes one or more translation tables for translating codes from different code structures. In a preferred embodiment of the present invention, a worker 30 connecting to database 20 selects a code structure with which he/she is familiar and database 20 automatically displays all codes in the selected code structure.

In a preferred embodiment of the present invention, code 100 includes a letter 102 which designates the primary system to which the identified element belongs. Table 1 shows an exemplary assignment of letters to the primary systems of an aircraft. The letters in table 1, are shown by way of example, and substantially any other letter designation may be used. In particular, letters 102 are preferably designated based on conventions used in the aircraft industry and/or of the user of database 20.

Table 1

System	code	system	code	system	code
Airstructure	A	Flight control	C	Fuel	F
Landing gear	G	Hydraulic	H	Electrical	L
Power generating	P	Avionics	R	ECS	V

A group of letters 104 following letter 102 identifies the sub-system to which the element belongs. Preferably, the group of letters 104 comprises two letters which stand for the sub-system. Preferably, each system as identified by letter 102 has a separate list of possible letter groups 104 which correspond to the system. Alternatively or additionally, a three digit number 106 designates the sub-system or sub-sub-system to which the element belongs. Preferably, the three digit number 106 is identical to the numbers used in part numbers according to the configuration management. Elements which are wires or tubes are then marked respectively with the letters W and T 108. Thereafter, the code preferably states parameters of the wire or tube. Preferably, in tubes, as illustrated by code structure 100B, the parameters comprise a two digit tube number 110 and a two digit tube size indication 112. For wires, as illustrated by code structure 100C, the parameters preferably comprise a two digit wire number 114, two letters indicating a wire segment 116, two digits which indicate a wire size 118 and a letter 120 which indicates whether the wire leads phase (P), ground (G) or thermocouple (T).

Preferably, in elements which have connections, as illustrated by code structure 100D which is a connector of the wire described by code structure 100C, the connections are given codes separate from the element itself. The connection codes preferably comprise the code of the element with an additional letter 122 indicating the type of the connection. Preferably, electrical connectors are indicated by a 'J' suffix, electrical plugs are indicated by a 'P' suffix, fluid inlets or outlets are indicated by an 'X' suffix and reciprocal fluid connectors are indicated by a 'Y' suffix. Thus, each wire and/or tube has several MRD codes. The entire wire or tube

has a code, and each connection end of the wire or code has a separate code. Preferably, database 20 lists the other connections to which each connection end is connected.

In a preferred embodiment of the invention, structure elements are indicated (as illustrated by code structure 100E) by a letter A 102, and are followed by three digits 130 which indicate the section of the aircraft in which the structure element is located. Preferably, digits 130 are determined based on a standard division of aircrafts, such as the configuration management three-digits regularly used in part numbers. Digits 130 are preferably followed by a single letter 132 which designates the type of the structure element, e.g., B-beam, L-longeron, H-hinge, S-skin, etc. Letter 132 is preferably followed by two digits 134 which represent a skin number of the element.

In a preferred embodiment of the invention, elements which are assemblies, i.e., include other major elements, have a suffix "A" 136. Preferably, assembly table 70 lists the MRD codes of the elements included in each assembly.

Alternatively or additionally, elements which are included in a parent element, have a code that begins with the code of the parent element and is followed by addition letters and/or digits which designate the specific element.

Alternatively to assigning the codes as described above, the MRD codes are assigned based on existing code systems from various fields of aircraft design, such as the wire codes defined in the above mentioned MIL-W-5088L standard. Preferably, two letters are added before these standard codes to designate the system and/or discipline to which they belong, in order to prevent two codes from different disciplines from assigning identical values.

Fig. 5 is a flow chart of the actions performed by an engineer desiring to perform a change in the design of an aircraft, in accordance with a preferred embodiment of the present invention. Changes may be performed for various reasons, such as problems detected by stress engineers, production personnel or other workers, failure of certain elements in ground or flight tests, and/or improvement attempts.

Preferably, before performing a change in the design of the aircraft, the engineer queries database 20 to determine (150) which major element is directly affected by the change. The change may include, for example, adding and/or removing one or more elements or changing an element's structure. Preferably, the engineer enters (152) the MRD code of the element directly affected by the change, and receives (154) the coordinates of the element. If the engineer does not know the MRD code he may search for it based on a part number or a function of the element. Alternatively or additionally, the engineer may search for the element using exact or approximate coordinates of the location of the element.

The engineer preferably determines (156) which elements will be affected by the change. Affected elements may include elements which are in the physical place, required for adding or changing the element for which the change is initiated. Other affected elements are, for example, elements which become, due to the change, within close proximity to a different element beyond safety requirements, elements whose connectors moved due to the change, and elements for which accessibility for maintenance changes. In a preferred embodiment of the present invention, an automatic routine determines for a given change which elements are affected by the change.

In a preferred embodiment of the invention, the engineer checks (157) the state of procurement or production of the affected elements to determine whether a change is worthwhile. For each of the affected elements, the engineer queries (158) for the workers responsible for the element. The engineer calls (160) these workers and determines with them whether the change is possible. If agreement is reached about the change, the engineer asks the person allowed to change records in database 20 to perform (162) the required change.

Alternatively or additionally, the engineer adds an action entry describing the desired change to the action list of the elements affected by the change. Preferably, a routine running on database 20 calls the attention of all the workers involved with the element to the new action entry, for example, by sending an e-mail message to the workers or a banner message which pops up on their work screen. Alternatively or additionally, workers periodically check the action lists of elements with which they are involved. Each of the notified workers may add an action to the action list approving or disapproving the change. Thus, most of workers may submit their comments about the change in writing and do not need to come in person to a meeting where the issue of the change is determined. Preferably, the time required to determine whether to perform the change is thus reduced significantly.

In some preferred embodiments of the present invention, database 20 includes a feature which allows sending e-mail messages to all the workers related to a specific element. Preferably, in opening the e-mail message database 20 is opened, displaying information relating to the element to which the e-mail message pertains. Thus, the recipient of the e-mail may immediately brief himself on the matter.

In a preferred embodiment of the present invention, a chat tool is associated with database 20. Each element 20 or group of elements, is assigned a virtual chat room in which workers 30 can discuss issues relating to the element. In a preferred embodiment of the present invention, a worker who wants to discuss a specific element enters a chat room by actuating a control displayed with database 20. Responsive there to a message is sent to all the workers

related to the element notifying them the identity of the worker waiting in the chat room. Preferably, the user entering the chat room may perform other tasks, including on database 20, while waiting for other workers to enter the chat room.

5 In a preferred embodiment of the invention, database 20 has a plurality of predetermined forms and/or reports which may be viewed by workers 30. Preferably, a worker may switch from one form to another using hypertext links which connect between related forms and reports. Thus, any worker can easily jump around database 20 to determine information on the overall design of the aircraft.

10 In some preferred embodiments of the present invention, workers 30 may use the forms and/or reports generated by database 20, as well as additional customized forms and/or reports in preparing reports. Preferably, a worker may use copy and paste computer features in preparing the reports in word processing tools. Alternatively or additionally, reports prepared by a word processor or other computerized tools may have one or more fields which receive their values from specific fields in database 20. Thus, every time the report is viewed or
15 printed these fields receive their updated values.

In a preferred embodiment of the present invention, a software associated with database 20 shows schematically the location in the aircraft of one or more elements of interest to a worker 30, based on the coordinates of the elements which are stored in the database. Thus, workers may view schematically the position of one or more element in the aircraft without
20 having database 20 carry large graphical figures and drawings.

In some preferred embodiments of the invention, database 20 includes electronic route cards that describe the actions performed and/or to be performed at different stages of the project on specific elements. Preferably, database 20 includes, for example, procurement, production and/or maintenance route cards. Preferably, workers 30 may customize personal
25 route cards which include information from database 20 according to their specific needs. Workers 30 may preferably view and/or print any of the route cards.

Using the method of Fig. 5, most of the design problems of the aircraft are resolved at a very early stage, instead of leaving these problems to a later stage when changes are costly. Database 20 gives workers 30 an insight to the overall design of the aircraft so that the workers
30 can resolve most of the interaction problems in the design on their own without the need for a large number of integration engineers and managers. Thus, the time required to design an aircraft is substantially shortened.

In some preferred embodiments of the invention, a maintenance engineer may query for all the elements which are accessed through a specific access door. The maintenance

engineer may determine the functionality of each element, the mean maintenance time of each element and the location of each element, and accordingly determine whether the aircraft design is feasible for maintenance. If any problems in maintenance arise, the maintenance engineer can easily determine which engineers are responsible for the problematic elements and contact the engineers in charge of the element.

In some preferred embodiments of the present invention, design engineers 34 enter general descriptions of the elements they design to database 20 before the drawings of the elements are prepared. Production 36 and/or procurement 38 personnel preferably use the information in database 20 to determine whether production and/or procurement of such elements is feasible under the cost constraints of the design project. Thus, most design errors are found before changing the design is very costly and time consuming.

Fig. 6 is a schematic illustration of a responsibility assignment matrix (RAM) 200, in accordance with a preferred embodiment of the present invention. Matrix 200 integrates an organization breakdown structure (OBS), shown on column 202, with a contract work breakdown structure (CWBS) shown on a heading row 204. Some of the intersection points are filled with engineer codes which represent the worker 30 in charge of the task described by the intersection point. Thus, RAM 200 is easily read by external entities who know nothing about the names of the workers in working environment 10. Furthermore, in case an engineer is replaced there is no need to update RAM 200. In some preferred embodiments of the present invention, the engineer codes are used in order to identify workers also in other forms.

It is noted that although the above described preferred embodiments relate to database 20 as a stand alone software, in some preferred embodiments, the database is integrated with other software tools, such as PDM and/or CAD tools.

It is noted that the aerospace industry is highly conservative due to the stringent safety measures it requires, the complexity of its products, the large numbers of workers working on a single product, and the planning time of the products. Thus, the present invention is highly relevant to this industry. It is noted, however, that although the above description is primarily related to design of the aerospace industry, some of the principles of the present invention are applicable to other industries, such as industries which produce other complex structures, such as other vehicles (e.g., automobiles, trains and ships), engines and complex constructions.

Attached as an Appendix A is a Microsoft Access97 documentation of the tables of an exemplary database system constructed in accordance with a preferred embodiment of the present invention. An Appendix B includes a schematic illustration of the tables of the database system documented in appendix A, and especially relationships between the tables.

An appendix C includes a plurality of exemplary forms and reports which may be used to access the database of appendix A, in accordance with a preferred embodiment of the present invention. These appendixes form an integral part of the disclosure of the invention.

5 It will be appreciated that the above described methods may be varied in many ways, including, changing the exact implementation used. It should also be appreciated that the above described description of methods and apparatus are to be interpreted as including apparatus, especially computer systems, for carrying out the methods and methods of using the apparatus.

10 The present invention has been described using non-limiting detailed descriptions of preferred embodiments thereof that are provided by way of example and are not intended to limit the scope of the invention. It should be understood that features described with respect to one embodiment may be used with other embodiments and that not all embodiments of the invention have all of the features shown in a particular figure. Variations of embodiments described will occur to persons of the art. Furthermore, the terms "comprise," "include,"
15 "have" and their conjugates, shall mean, when used in the claims, "including but not necessarily limited to." The scope of the invention is limited only by the following claims:

CLAIMS

1. A vehicle design database system, comprising:
a plurality of records which describe major elements of a vehicle, the records describing substantially only major elements;
5 at least one indication of the relative assembly of the major elements;
a plurality of references to workers in charge of the major elements; and
a plurality of references to documents related to the major elements.
2. A system according to claim 1, wherein the plurality of records comprise a record for
10 each of the major elements of the vehicle, and the major elements comprise elements which interact with other elements of the vehicle.
3. A system according to claim 1, wherein the at least one indication of the relative
15 assembly comprises an indication in each record of the major elements which are functionally related to the element described by the record.
4. A system according to claim 1, wherein the at least one indication of the relative
20 assembly comprises an indication in each record of the coordinates in the vehicles framework of the element described by the record.
5. A system according to claim 1, wherein the at least one indication of the relative
assembly comprises an indication for at least one of the major elements of an access door of the element.
- 25 6. A system according to claim 1, wherein the at least one indication of the relative assembly comprises an indication for at least one of the major elements of a compartment in which the element is located.
7. A system according to claim 1, wherein the at least one indication of the relative
30 assembly comprises an indication in each record of the major elements with which the element interacts.
8. A system according to claim 1, wherein the database substantially does not comprise drawings.

9. A system according to claim 1, wherein the database requires less than 1Gbytes of storage space.
- 5 10. A system according to claim 9, wherein the database requires less than 100Mbytes of storage space.
11. A system according to claim 1, wherein the database includes records for less than 10% of the elements of the vehicle.
- 10 12. A system according to claim 11, wherein the database includes records for less than 1% of the elements of the vehicle.
13. A system according to claim 1, wherein the references to the documents comprise
15 hypertext links.
14. A system according to claim 1, wherein the documents comprise diagrams including the elements.
- 20 15. A system according to claim 1, wherein the documents comprise procurement invoices of the elements.
16. A system according to claim 1, wherein each of the elements is identified by a unique code which is assigned according to a functionality of the element.
- 25 17. A system according to claim 1, wherein the database is associated with at least one computerized tool such that an update of information in the at least one computerized tool automatically updates the database.
- 30 18. A system according to claim 1, wherein the database is accessible over a network which connects a plurality of remote processors.
19. A system according to claim 1, wherein the database is stored on a portable computer.

20. A system according to claim 1, comprising input and output information of at least one data evaluation program molded into a form of the database.
21. A system according to claim 20, wherein the at least one data evaluation program comprises a design-to-cost program.
22. A system according to claim 20, wherein the at least one data evaluation program comprises a design-for-manufacture-and-assembly program.
23. A method of forming a vehicle design index, comprising:
automatically gathering, from a plurality of computerized tools, information on substantially all major elements of a vehicle; and
storing the information in the index.
24. A method according to claim 23, wherein gathering the information comprises gathering location information of the major elements.
25. A method according to claim 23, wherein gathering the information comprises gathering interconnection information of the major elements.
26. A method according to claim 23, wherein gathering the information comprises gathering references to documents describing the major elements.
27. A method according to claim 23, wherein a company designing the vehicle comprises at least one group of workers that are restricted from viewing at least some information relating to the vehicle and wherein gathering the information comprises gathering information which is not restricted from viewing by substantially any of the workers of the company.
28. A method according to claim 27, wherein gathering the information comprises gathering from tools which carry information restricted from viewing by at least one group of workers within the company designing the vehicle.
29. A method according to claim 23, wherein storing the information comprises storing the information in a database.

- 30

39. A method according to claim 32, wherein the plurality of different indications of the relative assembly of the element comprise an indication of a system to which the element belongs.

5 40. A method according to claim 39, wherein the indication of the system to which the element belongs comprises an indication of a relative function of the element within the system.

10 41. A method according to claim 32, comprising running a verification routine which finds design faults, on the database.

15 42. A method according to claim 41, wherein running the verification routine comprises running a routine which checks for elements which are distanced from each other less than a minimal allowed distance.

43. A method according to claim 32, wherein the database does not include diagrams or drawings.

20 44. An aircraft designed using the method of providing information of claim 32.

25 45. A method of labeling major elements of an aircraft, comprising:
determining for each major element a system to which the element belongs; and
assigning each of the major elements with a code which is unique to each occurrence of the element in the aircraft, responsive to the system to which the element belongs.

46. A method according to claim 45, wherein the major elements include elements belonging to the structure of the aircraft.

30 47. A method according to claim 45, wherein assigning the code comprises assigning a code having at least three digits in common with digits of a part number of the element, for substantially all the major elements of the aircraft.

48. A method according to claim 45, wherein assigning the code comprises assigning a plurality of codes to at least one single element.

49. A method according to claim 48, wherein the plurality of codes assigned to the at least one single element comprise codes which represent connection ends of the element.

5 50. A method of referencing workers working on an aircraft, comprising:
assigning configuration management codes to various aspects of the aircraft;
assigning each part of the aircraft, a part number code which includes the assigned
configuration management code of the aspect to which the part belongs; and
10 assigning worker codes which include the configuration management code of the
aspect on which the worker works.

51. A method according to claim 50, wherein the configuration management codes
comprise three digits.

15 52. A method according to claim 50, comprising preparing a responsibility matrix which
references workers by the assigned worker codes.

**VERIFIED STATEMENT (DECLARATION) CLAIMING SMALL ENTITY
STATUS (37 CFR 1.9(f) AND 1.27 (b)) - INDEPENDENT INVENTOR**

Docket No.
174/01142

Serial No.

Filing Date
Herewith

Patent No.

Issue Date

Applicant/ Shlomo SHKOLNIK
Patentee:

Invention: MULTIDISCIPLINARY PROJECT INTEGRATION SYSTEM

As a below named inventor, I hereby declare that I qualify as an independent inventor as defined in 37 CFR 1.9(c) for purposes of paying reduced fees under section 41(a) and (b) of Title 35, United States Code, to the Patent and Trademark Office with regard to the invention entitled above and described in:

- ☒ the specification to be filed herewith.
☐ the application identified above.
☐ the patent identified above.

I have not assigned, granted, conveyed or licensed and am under no obligation under contract or law to assign, grant, convey or license, any rights in the invention to any person who could not be classified as an independent inventor under 37 CFR 1.9(c) if that person had made the invention, or to any concern which would not qualify as a small business concern under 37 CFR 1.9(d) or a nonprofit organization under 37 CFR 1.9(e).

Each person, concern or organization to which I have assigned, granted, conveyed, or licensed or am under an obligation under contract or law to assign, grant, convey, or license any rights in the invention is listed below:

- ☒ No such person, concern or organization exists.
☐ Each such person, concern or organization is listed below.

*NOTE: Separate verified statements are required from each named person, concern or organization having rights to the invention averring to their status as small entities (37 CFR 1.27)

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☐ Individual☐ Small Business Concern☐ Nonprofit Organization

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I acknowledge the duty to file, in this application or patent, notification of any change in status resulting in loss of entitlement to small entity status prior to paying, or at the time of paying, the earliest of the issue fee or any maintenance fee due after the date on which status as a small entity is no longer appropriate. (37 CFR 1.28(b))

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application, any patent issuing thereon, or any patent to which this verified statement is directed.

NAME OF INVENTOR Shlomo SHKOLNIK

SIGNATURE OF INVENTOR S. Shkolnik

DATE: 20/12/1999

NAME OF INVENTOR _____

SIGNATURE OF INVENTOR _____

DATE: _____

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APPLICATION NUMBER: 60/173,718

FILING DATE: December 30, 1999

PRIORITY DOCUMENT

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Date Created:	3/26/99 2:58:59 PM	Def. Updatable:	False
Last Updated:	3/31/99 7:14:52 PM	OrderByOn:	False
Orientation:	0	RecordCount:	1833

Columns

Name	Type	Size
AMO	Text	14
AllowZeroLength:	False	
Attributes:	Variable Length	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	Default	
ColumnWidth:	1185	
DisplayControl:	Text Box	
Ordinal Position:	1	
Required:	False	
Source Field:	AMO	
Source Table:	AMO and MRD	
MRD	Text	14
AllowZeroLength:	False	
Attributes:	Variable Length	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	Default	
ColumnWidth:	Default	
DisplayControl:	Text Box	
Ordinal Position:	2	
Required:	False	
Source Field:	MRD	
Source Table:	AMO and MRD	
PartNumber	Text	50
AllowZeroLength:	False	
Attributes:	Variable Length	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	Default	
ColumnWidth:	1695	
DisplayControl:	Text Box	
Ordinal Position:	3	
Required:	False	
Source Field:	PartNumber	
Source Table:	AMO and MRD	

Relationships

AMO dataAMO and MRD

AMO data	AMO and MRD
AMO	1 ∞ AMO
Attributes:	Enforced
Attributes:	One-To-Many

MRDAMO and MRD

MRD	AMO and MRD
MRD	1 ∞ MRD
Attributes:	Enforced
Attributes:	One-To-Many

PartsAMO and MRD

Parts	AMO and MRD
PartNumber	1 ∞ PartNumber
Attributes:	Enforced
Attributes:	One-To-Many

Table Indexes

Name	Number of Fields
AMO dataAMO and MRD	1
Clustered:	False
Distinct Count:	589
Foreign:	True
Ignore Nulls:	False
Name:	AMO dataAMO and MRD
Primary:	False
Required:	False
Unique:	False
Fields:	AMO, Ascending
MRDAMO and MRD	1
Clustered:	False
Distinct Count:	1830
Foreign:	True
Ignore Nulls:	False
Name:	MRDAMO and MRD
Primary:	False
Required:	False
Unique:	False
Fields:	MRD, Ascending
PartsAMO and MRD	1

C:\WINDOWS\DESKTOP\DPM.mdb
Table: AMO and MRD

Clustered:	False
Distinct Count:	1746
Foreign:	True
Ignore Nulls:	False
Name:	PartsAMO and MRD
Primary:	False
Required:	False
Unique:	False
Fields:	PartNumber, Ascending
PrimaryKey	3
Clustered:	False
Distinct Count:	1833
Foreign:	False
Ignore Nulls:	False
Name:	PrimaryKey
Primary:	True
Required:	True
Unique:	True
Fields:	AMO, Ascending MRD, Ascending PartNumber, Ascending

User Permissions

admin

Group Permissions

Admins
Users

Properties

Date Created:	3/26/99 1:46:55 PM	Def. Updatable:	False
Last Updated:	5/21/99 10:27:58 AM	OrderByOn:	False
Orientation:	0	RecordCount:	589

Columns

Name	Type	Size
PEng	Number (Long)	4
AllowZeroLength: False Attributes: Fixed Size Collating Order: General ColumnHidden: False ColumnOrder: Default ColumnWidth: 645 Decimal Places: Auto Default Value: 0 DisplayControl: Text Box Ordinal Position: 1 Required: False Source Field: PEng Source Table: AMO data		
MEng	Number (Long)	4
AllowZeroLength: False Attributes: Fixed Size Collating Order: General ColumnHidden: False ColumnOrder: Default ColumnWidth: 675 Decimal Places: Auto Default Value: 0 DisplayControl: Text Box Ordinal Position: 2 Required: False Source Field: MEng Source Table: AMO data		
AMO	Text	14
AllowZeroLength: False Attributes: Variable Length Collating Order: General ColumnHidden: False ColumnOrder: Default ColumnWidth: 1185 DisplayControl: Text Box Ordinal Position: 3 Required: False Source Field: AMO Source Table: AMO data		
Form	Text	50
AllowZeroLength: False		

Attributes: Variable Length
Collating Order: General
ColumnHidden: False
ColumnOrder: Default
ColumnWidth: 660
DisplayControl: Text Box
Ordinal Position: 4
Required: False
Source Field: Form
Source Table: AMO data

Description Text 255

AllowZeroLength: False
Attributes: Variable Length
Collating Order: General
ColumnHidden: False
ColumnOrder: Default
ColumnWidth: 4410
DisplayControl: Text Box
Ordinal Position: 5
Required: False
Source Field: Description
Source Table: AMO data

T Text 50

AllowZeroLength: False
Attributes: Variable Length
Collating Order: General
ColumnHidden: False
ColumnOrder: Default
ColumnWidth: 420
DisplayControl: Text Box
Ordinal Position: 6
Required: False
Source Field: T
Source Table: AMO data

Material Text 50

AllowZeroLength: False
Attributes: Variable Length
Collating Order: General
ColumnHidden: False
ColumnOrder: Default
ColumnWidth: 1410
DisplayControl: Text Box
Ordinal Position: 7
Required: False
Source Field: Material
Source Table: AMO data

Thickness Number (Double) 8

AllowZeroLength: False
Attributes: Fixed Size
Collating Order: General
ColumnHidden: False
ColumnOrder: Default
ColumnWidth: 1080

	Decimal Places:	3		
	Default Value:	0		
	DisplayControl:	Text Box		
	Format:	Fixed		
	Ordinal Position:	8		
	Required:	False		
	Source Field:	Thickness		
	Source Table:	AMO data		
Width			Number (Double)	8
	AllowZeroLength:	False		
	Attributes:	Fixed Size		
	Collating Order:	General		
	ColumnHidden:	False		
	ColumnOrder:	Default		
	ColumnWidth:	705		
	Decimal Places:	1		
	Default Value:	0		
	DisplayControl:	Text Box		
	Format:	Fixed		
	Ordinal Position:	9		
	Required:	False		
	Source Field:	Width		
	Source Table:	AMO data		
Length			Number (Double)	8
	AllowZeroLength:	False		
	Attributes:	Fixed Size		
	Collating Order:	General		
	ColumnHidden:	False		
	ColumnOrder:	Default		
	ColumnWidth:	810		
	Decimal Places:	1		
	Default Value:	0		
	DisplayControl:	Text Box		
	Format:	Fixed		
	Ordinal Position:	10		
	Required:	False		
	Source Field:	Length		
	Source Table:	AMO data		
Diameter			Number (Double)	8
	AllowZeroLength:	False		
	Attributes:	Fixed Size		
	Collating Order:	General		
	ColumnHidden:	False		
	ColumnOrder:	Default		
	ColumnWidth:	1020		
	Decimal Places:	3		
	Default Value:	0		
	DisplayControl:	Text Box		
	Format:	Fixed		
	Ordinal Position:	11		
	Required:	False		
	Source Field:	Diameter		
	Source Table:	AMO data		

Weight	Number (Double)	8
AllowZeroLength:	False	
Attributes:	Fixed Size	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	Default	
ColumnWidth:	Default	
Decimal Places:	1	
Default Value:	0	
DisplayControl:	Text Box	
Format:	Fixed	
Ordinal Position:	12	
Required:	False	
Source Field:	Weight	
Source Table:	AMO data	
Date	Date/Time	8
AllowZeroLength:	False	
Attributes:	Fixed Size	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	Default	
ColumnWidth:	1020	
Format:	Medium Date	
Ordinal Position:	13	
Required:	False	
Source Field:	Date	
Source Table:	AMO data	
AMORepNumber	Text	50
AllowZeroLength:	False	
Attributes:	Variable Length	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	Default	
ColumnWidth:	1440	
DisplayControl:	Text Box	
Ordinal Position:	14	
Required:	False	
Source Field:	AMORepNumber	
Source Table:	AMO data	
Remark	Text	255
AllowZeroLength:	False	
Attributes:	Variable Length	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	Default	
ColumnWidth:	885	
DisplayControl:	Text Box	
Ordinal Position:	15	
Required:	False	
Source Field:	Remark	
Source Table:	AMO data	

Relationships

AMO dataAMO and MRD

AMO data	AMO and MRD
AMO	1 ∞ AMO
Attributes:	Enforced
Attributes:	One-To-Many

ManagementAMO data

Management	AMO data
Eng	1 ∞ MEng
Attributes:	Enforced
Attributes:	One-To-Many

ManagementAMO data1

Management	AMO data
Eng	1 ∞ PEng
Attributes:	Enforced
Attributes:	One-To-Many

ReportsAMO data

Reports	AMO data
ReportNumber	1 ∞ AMORepNumber
Attributes:	Enforced
Attributes:	One-To-Many

Table Indexes

Name	Number of Fields
AMORepNumber	1
Clustered:	False
Distinct Count:	1
Foreign:	False
Ignore Nulls:	False
Name:	AMORepNumber
Primary:	False
Required:	False
Unique:	False
Fields:	AMORepNumber, Ascending
ManagementAMO data	1

Clustered:	False
Distinct Count:	4
Foreign:	True
Ignore Nulls:	False
Name:	ManagementAMO data
Primary:	False
Required:	False
Unique:	False
Fields:	MEng, Ascending
ManagementAMO data1	1
Clustered:	False
Distinct Count:	1
Foreign:	True
Ignore Nulls:	False
Name:	ManagementAMO data1
Primary:	False
Required:	False
Unique:	False
Fields:	PEng, Ascending
MEng	1
Clustered:	False
Distinct Count:	4
Foreign:	False
Ignore Nulls:	False
Name:	MEng
Primary:	False
Required:	False
Unique:	False
Fields:	MEng, Ascending
PEng	1
Clustered:	False
Distinct Count:	1
Foreign:	False
Ignore Nulls:	False
Name:	PEng
Primary:	False
Required:	False
Unique:	False
Fields:	PEng, Ascending
PrimaryKey	1
Clustered:	False
Distinct Count:	589
Foreign:	False
Ignore Nulls:	False
Name:	PrimaryKey
Primary:	True
Required:	True
Unique:	True
Fields:	AMO, Ascending
ReportsAMO data	1
Clustered:	False
Distinct Count:	1
Foreign:	True
Ignore Nulls:	False

C:\WINDOWS\DESKTOP\DPM.mdb
Table: AMO data

Monday, December 27, 1999
Page: 28

Name:	ReportsAMO data
Primary:	False
Required:	False
Unique:	False
Fields:	AMORepNumber, Ascending

User Permissions

admin

Group Permissions

Admins
Users

50172718:121000

Properties

Date Created:	4/26/98 8:11:57 PM	Def. Updatable:	False
Filter:	((Assembly.MRD) Is Not Null))	Last Updated:	5/21/99 12:31:04 AM
OrderBy:	Assembly.InstPartNumber	OrderByOn:	True
Orientation:	0	RecordCount:	8251

Columns

Name	Type	Size
PEng AllowZeroLength: False Attributes: Fixed Size Collating Order: General ColumnHidden: False ColumnOrder: 1 ColumnWidth: 645 Decimal Places: Auto Default Value: 0 Description: Project Engineer DisplayControl: Text Box Ordinal Position: 1 Required: False Source Field: PEng Source Table: Assembly	Number (Long)	4
SEng AllowZeroLength: False Attributes: Fixed Size Collating Order: General ColumnHidden: False ColumnOrder: Default ColumnWidth: 645 Decimal Places: Auto Default Value: 0 Description: System Engineer DisplayControl: Text Box Ordinal Position: 2 Required: False Source Field: SEng Source Table: Assembly	Number (Long)	4
DwgNumber AllowZeroLength: False Attributes: Variable Length Collating Order: General ColumnHidden: False ColumnOrder: Default ColumnWidth: 1440 Description: Drawing Number DisplayControl: Text Box Ordinal Position: 3 Required: False Source Field: DwgNumber	Text	50

Source Table:		Assembly	
PartNumber		Text	50
AllowZeroLength:	False		
Attributes:	Variable Length		
Collating Order:	General		
ColumnHidden:	False		
ColumnOrder:	Default		
ColumnWidth:	1695		
Description:	Part Name		
DisplayControl:	Text Box		
Ordinal Position:	4		
Required:	False		
Source Field:	PartNumber		
Source Table:	Assembly		
MPQ		Number (Long)	4
AllowZeroLength:	False		
Attributes:	Fixed Size		
Collating Order:	General		
ColumnHidden:	False		
ColumnOrder:	Default		
ColumnWidth:	360		
Decimal Places:	Auto		
Default Value:	1		
Description:	The Part Number MRD qauntity		
DisplayControl:	Text Box		
Ordinal Position:	5		
Required:	False		
Source Field:	MPQ		
Source Table:	Assembly		
MRD		Text	14
AllowZeroLength:	False		
Attributes:	Variable Length		
Collating Order:	General		
ColumnHidden:	False		
ColumnOrder:	Default		
ColumnWidth:	1110		
Description:	Map Reference Designator		
DisplayControl:	Text Box		
Ordinal Position:	6		
Required:	False		
Source Field:	MRD		
Source Table:	Assembly		
Qty		Number (Long)	4
AllowZeroLength:	False		
Attributes:	Fixed Size		
Collating Order:	General		
ColumnHidden:	False		
ColumnOrder:	Default		
ColumnWidth:	465		
Decimal Places:	Auto		
Default Value:	0		
Description:	Quantity		
DisplayControl:	Text Box		

	Ordinal Position:	7		
	Required:	False		
	Source Field:	Qty		
	Source Table:	Assembly		
EFrom	AllowZeroLength:	False	Number (Long)	4
	Attributes:	Fixed Size		
	Collating Order:	General		
	ColumnHidden:	False		
	ColumnOrder:	Default		
	ColumnWidth:	450		
	Decimal Places:	Auto		
	Default Value:	0		
	Description:	Effectivity from a/c		
	DisplayControl:	Text Box		
	Ordinal Position:	8		
	Required:	False		
	Source Field:	EFrom		
	Source Table:	Assembly		
EFto	AllowZeroLength:	False	Number (Long)	4
	Attributes:	Fixed Size		
	Collating Order:	General		
	ColumnHidden:	False		
	ColumnOrder:	Default		
	ColumnWidth:	450		
	Decimal Places:	Auto		
	Default Value:	0		
	Description:	Effectivity to a/c		
	DisplayControl:	Text Box		
	Ordinal Position:	9		
	Required:	False		
	Source Field:	EFto		
	Source Table:	Assembly		
InstPartNumber	AllowZeroLength:	False	Text	50
	Attributes:	Variable Length		
	Collating Order:	General		
	ColumnHidden:	False		
	ColumnOrder:	Default		
	ColumnWidth:	1695		
	Description:	Installation Part Number		
	DisplayControl:	Text Box		
	Ordinal Position:	10		
	Required:	False		
	Source Field:	InstPartNumber		
	Source Table:	Assembly		
MRDA	AllowZeroLength:	False	Text	14
	Attributes:	Variable Length		
	Collating Order:	General		
	ColumnHidden:	False		
	ColumnOrder:	Default		

ColumnWidth: 1110
Description: Map Reference Designator Assembly
DisplayControl: Text Box
Ordinal Position: 11
Required: False
Source Field: MRDA
Source Table: Assembly

FromBL Number (Double) 8

AllowZeroLength: False
Attributes: Fixed Size
Collating Order: General
ColumnHidden: False
ColumnOrder: Default
ColumnWidth: 900
Decimal Places: 2
Default Value: 0
Description: From BL (in inch) - taken from MRD installation part number
DisplayControl: Text Box
Format: Fixed
Ordinal Position: 12
Required: False
Source Field: FromBL
Source Table: Assembly

ToBL Number (Double) 8

AllowZeroLength: False
Attributes: Fixed Size
Collating Order: General
ColumnHidden: False
ColumnOrder: Default
ColumnWidth: 645
Decimal Places: 2
Default Value: 0
Description: To BL (in inch) - taken from MRD installation part number
DisplayControl: Text Box
Format: Fixed
Ordinal Position: 13
Required: False
Source Field: ToBL
Source Table: Assembly

FromSTA Number (Double) 8

AllowZeroLength: False
Attributes: Fixed Size
Collating Order: General
ColumnHidden: False
ColumnOrder: Default
ColumnWidth: 1035
Decimal Places: 2
Default Value: 0
Description: From STA (in inch) - taken from MRD installation part number
DisplayControl: Text Box
Format: Fixed
Ordinal Position: 14
Required: False
Source Field: FromSTA

Source Table:		Assembly	
ToSTA		Number (Double)	8
AllowZeroLength:	False		
Attributes:	Fixed Size		
Collating Order:	General		
ColumnHidden:	False		
ColumnOrder:	Default		
ColumnWidth:	780		
Decimal Places:	2		
Default Value:	0		
Description:	From STA (in inch) - taken from MRD installation part number		
DisplayControl:	Text Box		
Format:	Fixed		
Ordinal Position:	15		
Required:	False		
Source Field:	ToSTA		
Source Table:	Assembly		
FromWL		Number (Double)	8
AllowZeroLength:	False		
Attributes:	Fixed Size		
Collating Order:	General		
ColumnHidden:	False		
ColumnOrder:	Default		
ColumnWidth:	960		
Decimal Places:	2		
Default Value:	0		
Description:	From WL (in inch) - taken from MRD installation part number		
DisplayControl:	Text Box		
Format:	Fixed		
Ordinal Position:	16		
Required:	False		
Source Field:	FromWL		
Source Table:	Assembly		
ToWL		Number (Double)	8
AllowZeroLength:	False		
Attributes:	Fixed Size		
Collating Order:	General		
ColumnHidden:	False		
ColumnOrder:	Default		
ColumnWidth:	705		
Decimal Places:	2		
Default Value:	0		
Description:	From WL (in inch) - taken from MRD installation part number		
DisplayControl:	Text Box		
Format:	Fixed		
Ordinal Position:	17		
Required:	False		
Source Field:	ToWL		
Source Table:	Assembly		
BLCG		Number (Double)	8
AllowZeroLength:	False		
Attributes:	Fixed Size		
Collating Order:	General		

ColumnHidden:	False
ColumnOrder:	Default
ColumnWidth:	690
Decimal Places:	2
Default Value:	0
Description:	BL Center of Gravity (in inch) - taken from MRD installation part number
DisplayControl:	Text Box
Format:	Fixed
Ordinal Position:	18
Required:	False
Source Field:	BLCG
Source Table:	Assembly

STACG

Number (Double)

8

AllowZeroLength:	False
Attributes:	Fixed Size
Collating Order:	General
ColumnHidden:	False
ColumnOrder:	Default
ColumnWidth:	825
Decimal Places:	2
Default Value:	0
Description:	STA Center of Gravity (in inch) - taken from MRD installation part number
DisplayControl:	Text Box
Format:	Fixed
Ordinal Position:	19
Required:	False
Source Field:	STACG
Source Table:	Assembly

WLCG

Number (Double)

8

AllowZeroLength:	False
Attributes:	Fixed Size
Collating Order:	General
ColumnHidden:	False
ColumnOrder:	Default
ColumnWidth:	750
Decimal Places:	2
Default Value:	0
Description:	WL Center of Gravity (in inch) - taken from MRD installation part number
DisplayControl:	Text Box
Format:	Fixed
Ordinal Position:	20
Required:	False
Source Field:	WLCG
Source Table:	Assembly

Relationships

DrawingsAssembly

Drawings		Assembly
DwgNumber	1 ∞	DwgNumber
Attributes:		Enforced
Attributes:		One-To-Many

ManagementAssembly

Management		Assembly
Eng	1 ∞	PEng
Attributes:		Enforced
Attributes:		One-To-Many

ManagementAssembly1

Management		Assembly
Eng	1 ∞	SEng
Attributes:		Enforced
Attributes:		One-To-Many

MRDAssembly

MRD		Assembly
MRD	1 ∞	MRD
Attributes:		Enforced
Attributes:		One-To-Many

MRDAssembly1

MRD		Assembly
MRD	1 ∞	MRDA
Attributes:		Enforced
Attributes:		One-To-Many

PartsAssembly

Parts	Assembly
PartNumber	1 ∞ PartNumber
Attributes:	Enforced
Attributes:	One-To-Many

PartsAssembly1

Parts	Assembly
PartNumber	1 ∞ InstPartNumber
Attributes:	Enforced
Attributes:	One-To-Many

Table Indexes

Name	Number of Fields
DrawingsAssembly	1
Clustered:	False
Distinct Count:	3144
Foreign:	True
Ignore Nulls:	False
Name:	DrawingsAssembly
Primary:	False
Required:	False
Unique:	False
Fields:	DwgNumber, Ascending
ManagementAssembly	1
Clustered:	False
Distinct Count:	10
Foreign:	True
Ignore Nulls:	False
Name:	ManagementAssembly
Primary:	False
Required:	False
Unique:	False
Fields:	PEng, Ascending
ManagementAssembly1	1
Clustered:	False
Distinct Count:	145
Foreign:	True
Ignore Nulls:	False
Name:	ManagementAssembly1
Primary:	False
Required:	False
Unique:	False
Fields:	SEng, Ascending

MRD	1
Clustered:	False
Distinct Count:	6608
Foreign:	False
Ignore Nulls:	False
Name:	MRD
Primary:	False
Required:	False
Unique:	False
Fields:	MRD, Ascending
MRDA	1
Clustered:	False
Distinct Count:	1946
Foreign:	False
Ignore Nulls:	False
Name:	MRDA
Primary:	False
Required:	False
Unique:	False
Fields:	MRDA, Ascending
MRDAssembly	1
Clustered:	False
Distinct Count:	6608
Foreign:	True
Ignore Nulls:	False
Name:	MRDAssembly
Primary:	False
Required:	False
Unique:	False
Fields:	MRD, Ascending
MRDAssembly1	1
Clustered:	False
Distinct Count:	1946
Foreign:	True
Ignore Nulls:	False
Name:	MRDAssembly1
Primary:	False
Required:	False
Unique:	False
Fields:	MRDA, Ascending
PartsAssembly	1
Clustered:	False
Distinct Count:	6009
Foreign:	True
Ignore Nulls:	False
Name:	PartsAssembly
Primary:	False
Required:	False
Unique:	False
Fields:	PartNumber, Ascending
PartsAssembly1	1
Clustered:	False
Distinct Count:	2471
Foreign:	True

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	Ignore Nulls:	False
	Name:	PartsAssembly1
	Primary:	False
	Required:	False
	Unique:	False
	Fields:	InstPartNumber, Ascending
PEng		1
	Clustered:	False
	Distinct Count:	10
	Foreign:	False
	Ignore Nulls:	False
	Name:	PEng
	Primary:	False
	Required:	False
	Unique:	False
	Fields:	PEng, Ascending
PrimaryKey		4
	Clustered:	False
	Distinct Count:	8251
	Foreign:	False
	Ignore Nulls:	False
	Name:	PrimaryKey
	Primary:	True
	Required:	True
	Unique:	True
	Fields:	DwgNumber, Ascending PartNumber, Ascending MPQ, Ascending InstPartNumber, Ascending
SEng		1
	Clustered:	False
	Distinct Count:	145
	Foreign:	False
	Ignore Nulls:	False
	Name:	SEng
	Primary:	False
	Required:	False
	Unique:	False
	Fields:	SEng, Ascending

User Permissions

admin

Group Permissions

Admins
Users

Properties

Date Created:	4/27/98 8:25:56 PM	Def. Updatable:	False
Last Updated:	5/20/99 11:19:10 PM	OrderByOn:	False
Orientation:	0	RecordCount:	122

Columns

Name	Type	Size
Bay	Text	50
AllowZeroLength: False Attributes: Variable Length Collating Order: General ColumnHidden: False ColumnOrder: 1 ColumnWidth: 510 Description: Bay Number DisplayControl: Text Box Ordinal Position: 1 Required: False Source Field: Bay Source Table: Bay		
BayName	Text	50
AllowZeroLength: False Attributes: Variable Length Collating Order: General ColumnHidden: False ColumnOrder: Default ColumnWidth: 3630 Description: Bay Name DisplayControl: Text Box Ordinal Position: 2 Required: False Source Field: BayName Source Table: Bay		
FromBL	Number (Double)	8
AllowZeroLength: False Attributes: Fixed Size Collating Order: General ColumnHidden: False ColumnOrder: Default ColumnWidth: 900 Decimal Places: 2 Default Value: 0 Description: From BL (in inch) DisplayControl: Text Box Format: Fixed Ordinal Position: 3 Required: False Source Field: FromBL Source Table: Bay		

ToBL	AllowZeroLength: False Attributes: Fixed Size Collating Order: General ColumnHidden: False ColumnOrder: Default ColumnWidth: 645 Decimal Places: 2 Default Value: 0 Description: To BL (in inch) DisplayControl: Text Box Format: Fixed Ordinal Position: 4 Required: False Source Field: ToBL Source Table: Bay	Number (Double)	8
FromSTA	AllowZeroLength: False Attributes: Fixed Size Collating Order: General ColumnHidden: False ColumnOrder: Default ColumnWidth: 1035 Decimal Places: 2 Default Value: 0 Description: From STA (in inch) DisplayControl: Text Box Format: Fixed Ordinal Position: 5 Required: False Source Field: FromSTA Source Table: Bay	Number (Double)	8
ToSTA	AllowZeroLength: False Attributes: Fixed Size Collating Order: General ColumnHidden: False ColumnOrder: Default ColumnWidth: Default Decimal Places: 2 Default Value: 0 Description: From STA (in inch) DisplayControl: Text Box Format: Fixed Ordinal Position: 6 Required: False Source Field: ToSTA Source Table: Bay	Number (Double)	8
FromWL	AllowZeroLength: False Attributes: Fixed Size Collating Order: General ColumnHidden: False ColumnOrder: Default	Number (Double)	8

A-40

ColumnWidth: 960
Decimal Places: 2
Default Value: 0
Description: From WL (in inch)
DisplayControl: Text Box
Format: Fixed
Ordinal Position: 7
Required: False
Source Field: FromWL
Source Table: Bay

ToWL Number (Double) 8

AllowZeroLength: False
Attributes: Fixed Size
Collating Order: General
ColumnHidden: False
ColumnOrder: Default
ColumnWidth: 705
Decimal Places: 2
Default Value: 0
Description: From WL (in inch)
DisplayControl: Text Box
Format: Fixed
Ordinal Position: 8
Required: False
Source Field: ToWL
Source Table: Bay

Notes Text 50

AllowZeroLength: False
Attributes: Variable Length
Collating Order: General
ColumnHidden: False
ColumnOrder: Default
ColumnWidth: 3585
Description: Bay Notes
DisplayControl: Text Box
Ordinal Position: 9
Required: False
Source Field: Notes
Source Table: Bay

Relationships

BayBay & Door

Bay Bay and Door
Bay 1 ∞ Bay

Attributes: Enforced
Attributes: One-To-Many

Table Indexes

Name	Number of Fields
PrimaryKey	1
Clustered:	False
Distinct Count:	122
Foreign:	False
Ignore Nulls:	False
Name:	PrimaryKey
Primary:	True
Required:	True
Unique:	True
Fields:	Bay, Ascending

User Permissions

admin

Group Permissions

Admins
Users

C:\WINDOWS\DESKTOP\DPM.mdb
Table: Bay and Door

Properties

Date Created:
Last Updated:
Orientation:

4/27/98 8:30:44 PM
6/29/99 10:57:32 PM
0

Def. Updatable:
OrderByOn:
RecordCount:

False
False
6077

Columns

Name
MRD

AllowZeroLength:
Attributes:
Collating Order:
ColumnHidden:
ColumnOrder:
ColumnWidth:
Description:
DisplayControl:
Ordinal Position:
Required:
Source Field:
Source Table:

False
Variable Length
General
False
Default
1110
Map Reference Designator
Text Box
1
False
MRD
Bay and Door

Type
Text

Size

14

Bay

AllowZeroLength:
Attributes:
Collating Order:
ColumnHidden:
ColumnOrder:
ColumnWidth:
Description:
DisplayControl:
Ordinal Position:
Required:
Source Field:
Source Table:

False
Variable Length
General
False
Default
510
Bay Number
Text Box
2
False
Bay
Bay and Door

Text

50

Door

AllowZeroLength:
Attributes:
Collating Order:
ColumnHidden:
ColumnOrder:
ColumnWidth:
Description:
DisplayControl:
Ordinal Position:
Required:
Source Field:
Source Table:

False
Variable Length
General
False
Default
795
Door Number
Text Box
3
False
Door
Bay and Door

Text

50

InstPartNumber

AllowZeroLength:
Attributes:

False
Variable Length

Text

50

A-43

Collating Order:	General
ColumnHidden:	False
ColumnOrder:	Default
ColumnWidth:	1695
Description:	InstPartNumber
DisplayControl:	Text Box
Ordinal Position:	4
Required:	False
Source Field:	InstPartNumber
Source Table:	Bay and Door

Relationships

BayBay & Door

	Bay		Bay and Door
	Bay	1 ∞	Bay
Attributes:		Enforced	
Attributes:		One-To-Many	

DoorBay and Door

	Door		Bay and Door
	Door	1 ∞	Door
Attributes:		Enforced	
Attributes:		One-To-Many	

MRDBay and Door

	MRD		Bay and Door
	MRD	1 ∞	MRD
Attributes:		Enforced	
Attributes:		One-To-Many	

PartsBay and Door

	Parts		Bay and Door
	PartNumber	1 ∞	InstPartNumber
Attributes:		Enforced	
Attributes:		One-To-Many	

Table Indexes

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Name	Number of Fields
BayBay & Door	1
Clustered:	False
Distinct Count:	86
Foreign:	True
Ignore Nulls:	False
Name:	BayBay & Door
Primary:	False
Required:	False
Unique:	False
Fields:	Bay, Ascending
DoorBay and Door	1
Clustered:	False
Distinct Count:	295
Foreign:	True
Ignore Nulls:	False
Name:	DoorBay and Door
Primary:	False
Required:	False
Unique:	False
Fields:	Door, Ascending
MRDBay and Door	1
Clustered:	False
Distinct Count:	4581
Foreign:	True
Ignore Nulls:	False
Name:	MRDBay and Door
Primary:	False
Required:	False
Unique:	False
Fields:	MRD, Ascending
PartsBay and Door	1
Clustered:	False
Distinct Count:	1373
Foreign:	True
Ignore Nulls:	False
Name:	PartsBay and Door
Primary:	False
Required:	False
Unique:	False
Fields:	InstPartNumber, Ascending
PrimaryKey	4
Clustered:	False
Distinct Count:	6077
Foreign:	False
Ignore Nulls:	False
Name:	PrimaryKey
Primary:	True
Required:	True
Unique:	True
Fields:	MRD, Ascending Bay, Ascending Door, Ascending InstPartNumber, Ascending

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User Permissions

admin

Group Permissions

Admins
Users

[illegible]

C:\WINDOWS\DESKTOP\DPM.mdb
Table: Components

Properties		Def. Updatable:	False
Date Created:	4/28/98 7:29:51 PM	OrderByOn:	True
Last Updated:	3/6/99 3:29:33 AM	RecordCount:	9790
Orientation:	0		

<u>Columns</u>		Type	Size
Name		Text	
PartNumber	AllowZeroLength: Attributes: Collating Order: ColumnHidden: ColumnOrder: ColumnWidth: Description: DisplayControl: Ordinal Position: Required: Source Field: Source Table:	False Variable Length General False Default 1695 PartNumber Text Box 1 False PartNumber Components	50
Manufacturer	AllowZeroLength: Attributes: Collating Order: ColumnHidden: ColumnOrder: ColumnWidth: Description: DisplayControl: Ordinal Position: Required: Source Field: Source Table:	False Variable Length General False Default 1215 Manufacturer Text Box 2 False Manufacturer Components	50
VendorPN	AllowZeroLength: Attributes: Collating Order: ColumnHidden: ColumnOrder: ColumnWidth: Description: DisplayControl: Ordinal Position: Required: Source Field: Source Table:	False Variable Length General True Default 1620 Vendor Part Number Text Box 3 False VendorPN Components	50
Supplier	AllowZeroLength: Attributes:	False Variable Length	

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Collating Order: General
ColumnHidden: False
ColumnOrder: Default
ColumnWidth: 1665
Description: Supplier
DisplayControl: Text Box
Ordinal Position: 4
Required: False
Source Field: Supplier
Source Table: Components

Lead

Number (Long)

4

AllowZeroLength: False
Attributes: Fixed Size
Collating Order: General
ColumnHidden: False
ColumnOrder: Default
ColumnWidth: 570
Decimal Places: Auto
Default Value: 0
Description: Lead Time for procurement or manufacture, in days
DisplayControl: Text Box
Ordinal Position: 5
Required: False
Source Field: Lead
Source Table: Components

Price

Currency

8

AllowZeroLength: False
Attributes: Fixed Size
Collating Order: General
ColumnHidden: False
ColumnOrder: Default
ColumnWidth: 1320
Decimal Places: Auto
Default Value: 0
Description: Price in dollars
Format: \$#,##0.00;(\$#,##0.00)
Ordinal Position: 6
Required: False
Source Field: Price
Source Table: Components

DEng

Number (Long)

4

AllowZeroLength: False
Attributes: Fixed Size
Collating Order: General
ColumnHidden: True
ColumnOrder: Default
ColumnWidth: 0
Decimal Places: Auto
Default Value: 0
Description: Design Engineer
DisplayControl: Text Box
Ordinal Position: 7
Required: False
Source Field: DEng

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Source Table:		Components	
DPref		Number (Long)	4
	AllowZeroLength:	False	
	Attributes:	Fixed Size	
	Collating Order:	General	
	ColumnHidden:	False	
	ColumnOrder:	Default	
	ColumnWidth:	435	
	Decimal Places:	Auto	
	Default Value:	0	
	Description:	Design Preference, 1 is preferred	
	DisplayControl:	Text Box	
	Ordinal Position:	8	
	Required:	False	
	Source Field:	DPref	
	Source Table:	Components	
MEng		Number (Long)	4
	AllowZeroLength:	False	
	Attributes:	Fixed Size	
	Collating Order:	General	
	ColumnHidden:	True	
	ColumnOrder:	Default	
	ColumnWidth:	675	
	Decimal Places:	Auto	
	Default Value:	0	
	Description:	Manufacture Engineer	
	DisplayControl:	Text Box	
	Ordinal Position:	9	
	Required:	False	
	Source Field:	MEng	
	Source Table:	Components	
MPref		Number (Long)	4
	AllowZeroLength:	False	
	Attributes:	Fixed Size	
	Collating Order:	General	
	ColumnHidden:	False	
	ColumnOrder:	Default	
	ColumnWidth:	375	
	Decimal Places:	Auto	
	Default Value:	0	
	Description:	Manufacture Preference, 1 is preferred	
	DisplayControl:	Text Box	
	Ordinal Position:	10	
	Required:	False	
	Source Field:	MPref	
	Source Table:	Components	
PrEng		Number (Long)	4
	AllowZeroLength:	False	
	Attributes:	Fixed Size	
	Collating Order:	General	
	ColumnHidden:	True	
	ColumnOrder:	Default	
	ColumnWidth:	720	

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	Decimal Places: Default Value: Description: DisplayControl: Ordinal Position: Required: Source Field: Source Table:	Auto 0 Procurement Engineer Text Box 11 False PrEng Components		
PrPref	AllowZeroLength: Attributes: Collating Order: ColumnHidden: ColumnOrder: ColumnWidth: Decimal Places: Default Value: Description: DisplayControl: Ordinal Position: Required: Source Field: Source Table:	False Fixed Size General False Default 375 Auto 0 Procurement Preference, 1 is preferred Text Box 12 False PrPref Components	Number (Long)	4
PEng	AllowZeroLength: Attributes: Collating Order: ColumnHidden: ColumnOrder: ColumnWidth: Decimal Places: Default Value: Description: DisplayControl: Ordinal Position: Required: Source Field: Source Table:	False Fixed Size General True Default 645 Auto 0 Project Engineer Text Box 13 False PEng Components	Number (Long)	4
Status	AllowZeroLength: Attributes: Collating Order: ColumnHidden: ColumnOrder: ColumnWidth: Decimal Places: Default Value: Description: DisplayControl: Ordinal Position: Required: Source Field: Source Table:	False Fixed Size General False Default 330 Auto 1 Approved for:design-1, procurement - 2, retrofit-3;forbidden-4 Text Box 14 False Status Components	Number (Integer)	2

A-50

Date	AllowZeroLength:	False	Date/Time	8
	Attributes:	Fixed Size		
	Collating Order:	General		
	ColumnHidden:	True		
	ColumnOrder:	Default		
	ColumnWidth:	1065		
	Description:	Date		
	Format:	Medium Date		
	Ordinal Position:	15		
	Required:	False		
	Source Field:	Date		
	Source Table:	Components		
Remarks	AllowZeroLength:	False	Text	255
	Attributes:	Variable Length		
	Collating Order:	General		
	ColumnHidden:	False		
	ColumnOrder:	Default		
	ColumnWidth:	3120		
	Description:	Remark		
	DisplayControl:	Text Box		
	Ordinal Position:	16		
	Required:	False		
	Source Field:	Remarks		
	Source Table:	Components		

Relationships

ManagementComponents

	Management		Components
Eng	1	∞	MEng
Attributes:	Enforced		
Attributes:	One-To-Many		

ManagementComponents1

	Management		Components
Eng	1	∞	DEng
Attributes:	Enforced		
Attributes:	One-To-Many		

ManagementComponents2

Management		Components
Eng	1 ∞ PEng	

Attributes:	Enforced
Attributes:	One-To-Many

ManagementComponents3

Management		Components
Eng	1 ∞ PrEng	

Attributes:	Enforced
Attributes:	One-To-Many

ManufacturerPart number & manufacturer

Manufacturer		Components
Company	1 ∞ Manufacturer	

Attributes:	Enforced
Attributes:	One-To-Many

PartsManufacturers selection

Parts		Components
PartNumber	1 ∞ PartNumber	

Attributes:	Enforced
Attributes:	One-To-Many

SupplierComponents

Supplier		Components
Company	1 ∞ Supplier	

Attributes:	Enforced
Attributes:	One-To-Many

Table Indexes

Name	Number of Fields
DEng	1

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Clustered:	False
Distinct Count:	143
Foreign:	False
Ignore Nulls:	False
Name:	DEng
Primary:	False
Required:	False
Unique:	False
Fields:	DEng, Ascending
ManagementComponents	1
Clustered:	False
Distinct Count:	11
Foreign:	True
Ignore Nulls:	False
Name:	ManagementComponents
Primary:	False
Required:	False
Unique:	False
Fields:	MEng, Ascending
ManagementComponents1	1
Clustered:	False
Distinct Count:	143
Foreign:	True
Ignore Nulls:	False
Name:	ManagementComponents1
Primary:	False
Required:	False
Unique:	False
Fields:	DEng, Ascending
ManagementComponents2	1
Clustered:	False
Distinct Count:	1
Foreign:	True
Ignore Nulls:	False
Name:	ManagementComponents2
Primary:	False
Required:	False
Unique:	False
Fields:	PEng, Ascending
ManagementComponents3	1
Clustered:	False
Distinct Count:	1
Foreign:	True
Ignore Nulls:	False
Name:	ManagementComponents3
Primary:	False
Required:	False
Unique:	False
Fields:	PrEng, Ascending
ManufacturerPart number & manufacturer	1
Clustered:	False
Distinct Count:	118
Foreign:	True
Ignore Nulls:	False

Name:	ManufacturerPart number & manufacturer
Primary:	False
Required:	False
Unique:	False
Fields:	Manufacturer, Ascending
MEng	1
Clustered:	False
Distinct Count:	11
Foreign:	False
Ignore Nulls:	False
Name:	MEng
Primary:	False
Required:	False
Unique:	False
Fields:	MEng, Ascending
PartsManufacturers selection	1
Clustered:	False
Distinct Count:	5152
Foreign:	True
Ignore Nulls:	False
Name:	PartsManufacturers selection
Primary:	False
Required:	False
Unique:	False
Fields:	PartNumber, Ascending
PrEng	1
Clustered:	False
Distinct Count:	1
Foreign:	False
Ignore Nulls:	False
Name:	PrEng
Primary:	False
Required:	False
Unique:	False
Fields:	PrEng, Ascending
PrimaryKey	3
Clustered:	False
Distinct Count:	9790
Foreign:	False
Ignore Nulls:	False
Name:	PrimaryKey
Primary:	True
Required:	True
Unique:	True
Fields:	PartNumber, Ascending Manufacturer, Ascending Supplier, Ascending
SupplierComponents	1
Clustered:	False
Distinct Count:	107
Foreign:	True
Ignore Nulls:	False
Name:	SupplierComponents
Primary:	False

Admins
Users

Properties

Date Created: 4/27/98 8:53:20 PM
Last Updated: 5/22/99 11:33:13 PM
Orientation: 0

Def. Updatable: False
OrderByOn: False
RecordCount: 67

Columns

Name	Type	Size
PEng	Number (Long)	4
AllowZeroLength:	False	
Attributes:	Fixed Size	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	Default	
ColumnWidth:	645	
Decimal Places:	Auto	
Default Value:	0	
Description:	Project Engineer	
DisplayControl:	Text Box	
Ordinal Position:	1	
Required:	True	
Source Field:	PEng	
Source Table:	Critical parts	
FEng	Number (Long)	4
AllowZeroLength:	False	
Attributes:	Fixed Size	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	Default	
ColumnWidth:	630	
Decimal Places:	Auto	
Default Value:	0	
Description:	Fatigue Engineer	
DisplayControl:	Text Box	
Ordinal Position:	2	
Required:	True	
Source Field:	FEng	
Source Table:	Critical parts	
MRD	Text	14
AllowZeroLength:	False	
Attributes:	Variable Length	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	Default	
ColumnWidth:	1095	
Description:	Map Reference Designator	
DisplayControl:	Text Box	
Ordinal Position:	3	
Required:	False	
Source Field:	MRD	
Source Table:	Critical parts	

A-56

CPRReportNumber	False	Text	50
AllowZeroLength:	False		
Attributes:	Variable Length		
Collating Order:	General		
ColumnHidden:	False		
ColumnOrder:	Default		
ColumnWidth:	Default		
Description:	Critical Parts Report Number		
DisplayControl:	Text Box		
Ordinal Position:	4		
Required:	True		
Source Field:	CPRReportNumber		
Source Table:	Critical parts		

Notes	False	Text	255
AllowZeroLength:	False		
Attributes:	Variable Length		
Collating Order:	General		
ColumnHidden:	False		
ColumnOrder:	Default		
ColumnWidth:	3735		
DisplayControl:	Text Box		
Ordinal Position:	5		
Required:	False		
Source Field:	Notes		
Source Table:	Critical parts		

Relationships

ManagementCritical parts

Management		Critical parts
Eng	1 ∞ FEng	
Attributes:	Enforced	
Attributes:	One-To-Many	

ManagementCritical parts1

Management		Critical parts
Eng	1 ∞ PEng	
Attributes:	Enforced	
Attributes:	One-To-Many	

MRDCritical parts

MRD

Critical parts

MRD

MRD

Attributes:
Attributes:

Unique, Enforced
One-To-One

ReportsCritical parts

Reports

Critical parts

ReportNumber

1 ∞ CReportNumber

Attributes:
Attributes:

Enforced
One-To-Many

Table Indexes

Name	Number of Fields
CReportNumber	1
Clustered:	False
Distinct Count:	1
Foreign:	False
Ignore Nulls:	False
Name:	CReportNumber
Primary:	False
Required:	False
Unique:	False
Fields:	CReportNumber, Ascending
FEng	1
Clustered:	False
Distinct Count:	1
Foreign:	False
Ignore Nulls:	False
Name:	FEng
Primary:	False
Required:	False
Unique:	False
Fields:	FEng, Ascending
ManagementCritical parts	1
Clustered:	False
Distinct Count:	1
Foreign:	True
Ignore Nulls:	False
Name:	ManagementCritical parts
Primary:	False
Required:	False
Unique:	False
Fields:	FEng, Ascending

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ManagementCritical parts1	1
Clustered:	False
Distinct Count:	1
Foreign:	True
Ignore Nulls:	False
Name:	ManagementCritical parts1
Primary:	False
Required:	False
Unique:	False
Fields:	PEng, Ascending
MRDCritical parts	1
Clustered:	False
Distinct Count:	67
Foreign:	True
Ignore Nulls:	False
Name:	MRDCritical parts
Primary:	False
Required:	False
Unique:	True
Fields:	MRD, Ascending
PEng	1
Clustered:	False
Distinct Count:	1
Foreign:	False
Ignore Nulls:	False
Name:	PEng
Primary:	False
Required:	False
Unique:	False
Fields:	PEng, Ascending
PrimaryKey	1
Clustered:	False
Distinct Count:	67
Foreign:	False
Ignore Nulls:	False
Name:	PrimaryKey
Primary:	True
Required:	True
Unique:	True
Fields:	MRD, Ascending
ReportsCritical parts	1
Clustered:	False
Distinct Count:	1
Foreign:	True
Ignore Nulls:	False
Name:	ReportsCritical parts
Primary:	False
Required:	False
Unique:	False
Fields:	CPReportNumber, Ascending

User Permissions

admin

Group Permissions

Admins
Users

GROUP: GROUPS

A-60

Date Created: 8/14/98 11:56:09 PM
Last Updated: 3/29/99 9:52:35 PM
Orientation: 0

Def. Updatable.	False
OrderByOn:	False
RecordCount:	3974

Name	Type	Size
MRD	Text	14
AllowZeroLength:	False	
Attributes:	Variable Length	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	1	
ColumnWidth:	1200	
Description:	Map Reference Designator	
DisplayControl:	Text Box	
Ordinal Position:	1	
Required:	False	
Source Field:	MRD	
Source Table:	Design criteria	
Item	Number (Long)	4
AllowZeroLength:	False	
Attributes:	Fixed Size	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	Default	
ColumnWidth:	480	
Decimal Places:	Auto	
Default Value:	0	
Description:	Item Number	
DisplayControl:	Text Box	
Ordinal Position:	2	
Required:	False	
Source Field:	Item	
Source Table:	Design criteria	
DesignCriteria	Text	255
AllowZeroLength:	False	
Attributes:	Variable Length	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	Default	
ColumnWidth:	5595	
Description:	DesignCriteria	
DisplayControl:	Text Box	
Ordinal Position:	3	
Required:	False	
Source Field:	DesignCriteria	
Source Table:	Design criteria	
ReportNumber	Text	50

A-61

AllowZeroLength:	False
Attributes:	Variable Length
Collating Order:	General
ColumnHidden:	False
ColumnOrder:	Default
ColumnWidth:	Default
Description:	ReportNumber
DisplayControl:	Text Box
Ordinal Position:	4
Required:	False
Source Field:	ReportNumber
Source Table:	Design criteria

Relationships

MRDDesign criteria

MRD	Design criteria
MRD	1 ∞ MRD
Attributes:	Enforced
Attributes:	One-To-Many

ReportsDesign criteria

Reports	Design criteria
ReportNumber	1 ∞ ReportNumber
Attributes:	Enforced
Attributes:	One-To-Many

Table Indexes

Name	Number of Fields
MRDDesign criteria	1
Clustered:	False
Distinct Count:	1451
Foreign:	True
Ignore Nulls:	False
Name:	MRDDesign criteria
Primary:	False
Required:	False
Unique:	False
Fields:	MRD, Ascending
PrimaryKey	2
Clustered:	False
Distinct Count:	3974
Foreign:	False
Ignore Nulls:	False
Name:	PrimaryKey

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Primary:	True
Required:	True
Unique:	True
Fields:	MRD, Ascending Item, Ascending
ReportNumber	1
Clustered:	False
Distinct Count:	107
Foreign:	False
Ignore Nulls:	False
Name:	ReportNumber
Primary:	False
Required:	False
Unique:	False
Fields:	ReportNumber, Ascending
ReportsDesign criteria	1
Clustered:	False
Distinct Count:	107
Foreign:	True
Ignore Nulls:	False
Name:	ReportsDesign criteria
Primary:	False
Required:	False
Unique:	False
Fields:	ReportNumber, Ascending

User Permissions

admin

Group Permissions

Admins
Users

Properties

Date Created: 5/29/99 10:20:51 AM
Last Updated: 6/29/99 11:29:42 PM

Def. Updatable:
OrderBy:

False
[Design-to-cost
analysis].ReportNumber DESC

OrderByOn: False
RecordCount: 5176

Orientation: 0

Columns

Name	Type	Size
PartNumber	Text	50
AllowZeroLength:	False	
Attributes:	Variable Length	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	Default	
ColumnWidth:	Default	
Description:	Part Number	
DisplayControl:	Text Box	
Ordinal Position:	1	
Required:	False	
Source Field:	PartNumber	
Source Table:	Design-to-cost analysis	
ReportNumber	Text	50
AllowZeroLength:	False	
Attributes:	Variable Length	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	Default	
ColumnWidth:	Default	
Description:	ReportNumber	
DisplayControl:	Text Box	
Ordinal Position:	2	
Required:	False	
Source Field:	ReportNumber	
Source Table:	Design-to-cost analysis	
Remarks	Text	50
AllowZeroLength:	False	
Attributes:	Variable Length	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	Default	
ColumnWidth:	Default	
Description:	Remarks	
DisplayControl:	Text Box	
Ordinal Position:	3	
Required:	False	
Source Field:	Remarks	
Source Table:	Design-to-cost analysis	

C:\WINDOWS\DESKTOP\DPM.mdb
Table: Design-to-cost analysis

Relationships

PartsDesign-to-cost analysis

Parts
PartNumber

Attributes:
Attributes:

Design-to-cost analysis

1 1
PartNumber

Unique, Enforced
One-To-One

ReportsDesign-to-cost analysis

Reports
ReportNumber

Attributes:
Attributes:

Design-to-cost analysis

1 ∞ ReportNumber

Enforced
One-To-Many

Table Indexes

Name

PartsDesign-to-cost analysis

Clustered:
Distinct Count:
Foreign:
Ignore Nulls:
Name:
Primary:
Required:
Unique:
Fields:

Number of Fields
1
False
5176
True
False
PartsDesign-to-cost analysis
False
False
True
PartNumber, Ascending

PrimaryKey

Clustered:
Distinct Count:
Foreign:
Ignore Nulls:
Name:
Primary:
Required:
Unique:
Fields:

1
False
5176
False
False
PrimaryKey
True
True
True
PartNumber, Ascending

ReportNumber

Clustered:
Distinct Count:
Foreign:
Ignore Nulls:
Name:
Primary:
Required:
Unique:

1
False
1
False
False
ReportNumber
False
False
False

A-65

Fields:	ReportNumber, Ascending
ReportsDesign-to-cost analysis	1
Clustered:	False
Distinct Count:	1
Foreign:	True
Ignore Nulls:	False
Name:	ReportsDesign-to-cost analysis
Primary:	False
Required:	False
Unique:	False
Fields:	ReportNumber, Ascending

User Permissions

admin

Group Permissions

Admins
Users

[illegible]

Properties

Date Created:	4/21/99 7:10:54 PM	Def. Updatable:	False
Last Updated:	5/29/99 10:18:26 AM	OrderBy:	[DFMA analysis].ReportNumber
OrderByOn:	False	Orientation:	0
RecordCount:	5176		

Columns

Name	Type	Size
PartNumber	Text	50
AllowZeroLength:	False	
Attributes:	Variable Length	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	Default	
ColumnWidth:	Default	
Description:	Part Number	
DisplayControl:	Text Box	
Ordinal Position:	1	
Required:	False	
Source Field:	PartNumber	
Source Table:	DFMA analysis	
Index	Number (Double)	8
AllowZeroLength:	False	
Attributes:	Fixed Size	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	Default	
ColumnWidth:	690	
Decimal Places:	2	
Default Value:	0	
Description:	DFA Index	
DisplayControl:	Text Box	
Format:	Fixed	
Ordinal Position:	2	
Required:	False	
Source Field:	Index	
Source Table:	DFMA analysis	
Time	Number (Double)	8
AllowZeroLength:	False	
Attributes:	Fixed Size	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	Default	
ColumnWidth:	630	
Decimal Places:	2	
Default Value:	0	
Description:	Time, in seconds	
DisplayControl:	Text Box	
Format:	Fixed	
Ordinal Position:	3	

A-67

Required: False
Source Field: Time
Source Table: DFMA analysis

LaborCost	Number (Double)	8
AllowZeroLength:	False	
Attributes:	Fixed Size	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	Default	
ColumnWidth:	1110	
Decimal Places:	2	
Default Value:	0	
Description:	Labor Cost, in dollars	
DisplayControl:	Text Box	
Format:	\$\$,##0.00;(\$\$,##0.00)	
Ordinal Position:	4	
Required:	False	
Source Field:	LaborCost	
Source Table:	DFMA analysis	

ToolCost	Number (Double)	8
AllowZeroLength:	False	
Attributes:	Fixed Size	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	Default	
ColumnWidth:	975	
Decimal Places:	2	
Default Value:	0	
Description:	Tool Cost, in dollars	
DisplayControl:	Text Box	
Format:	\$\$,##0.00;(\$\$,##0.00)	
Ordinal Position:	5	
Required:	False	
Source Field:	ToolCost	
Source Table:	DFMA analysis	

AddCost	Number (Double)	8
AllowZeroLength:	False	
Attributes:	Fixed Size	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	Default	
ColumnWidth:	930	
Decimal Places:	2	
Default Value:	0	
Description:	Additional Cost, in dollars	
DisplayControl:	Text Box	
Format:	\$\$,##0.00;(\$\$,##0.00)	
Ordinal Position:	6	
Required:	False	
Source Field:	AddCost	
Source Table:	DFMA analysis	

ItemCost	Number (Double)	8
AllowZeroLength:	False	

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Attributes:	Fixed Size
Collating Order:	General
ColumnHidden:	False
ColumnOrder:	Default
ColumnWidth:	975
Decimal Places:	2
Default Value:	0
Description:	Item Cost, in dollars
DisplayControl:	Text Box
Format:	\$\$,##0.00;(\$\$,##0.00)
Ordinal Position:	7
Required:	False
Source Field:	ItemCost
Source Table:	DFMA analysis

ManTCost	Number (Double)	8
----------	-----------------	---

AllowZeroLength:	False
Attributes:	Fixed Size
Collating Order:	General
ColumnHidden:	False
ColumnOrder:	Default
ColumnWidth:	Default
Decimal Places:	2
Default Value:	0
Description:	Manuf.Tool Cost, in dollars
DisplayControl:	Text Box
Format:	\$\$,##0.00;(\$,##0.00)
Ordinal Position:	8
Required:	False
Source Field:	ManTCost
Source Table:	DFMA analysis

ReportNumber	Text	50
--------------	------	----

AllowZeroLength:	False
Attributes:	Variable Length
Collating Order:	General
ColumnHidden:	False
ColumnOrder:	Default
ColumnWidth:	Default
Description:	ReportNumber
DisplayControl:	Text Box
Ordinal Position:	9
Required:	False
Source Field:	ReportNumber
Source Table:	DFMA analysis

Table Indexes

Name	Number of Fields
PrimaryKey	1
Clustered:	False
Distinct Count:	5176
Foreign:	False
Ignore Nulls:	False
Name:	PrimaryKey
Primary:	True

Required:	True
Unique:	True
Fields:	PartNumber, Ascending
ReportNumber	1
Clustered:	False
Distinct Count:	1
Foreign:	False
Ignore Nulls:	False
Name:	ReportNumber
Primary:	False
Required:	False
Unique:	False
Fields:	ReportNumber, Ascending

User Permissions

admin

Group Permissions

Admins
Users

A-70

Properties

Date Created: 3/9/99 11:45:24 PM
Last Updated: 4/5/99 1:28:44 PM
OrderByOn: False
RecordCount: 7277

Def. Updatable: False
OrderBy: [DFMA criteria].MinDimension
Orientation: 0

Columns

Name	Type	Size
DwgNumber	Text	50
AllowZeroLength:	False	
Attributes:	Variable Length	
Collating Order:	General	
ColumnHidden:	True	
ColumnOrder:	Default	
ColumnWidth:	1320	
DisplayControl:	Text Box	
Ordinal Position:	1	
Required:	False	
Source Field:	DwgNumber	
Source Table:	DFMA criteria	
PartNumber	Text	50
AllowZeroLength:	False	
Attributes:	Variable Length	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	Default	
ColumnWidth:	1695	
Description:	Part Number	
DisplayControl:	Text Box	
Ordinal Position:	2	
Required:	False	
Source Field:	PartNumber	
Source Table:	DFMA criteria	
PartName	Text	50
AllowZeroLength:	False	
Attributes:	Variable Length	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	Default	
ColumnWidth:	2805	
DisplayControl:	Text Box	
Ordinal Position:	3	
Required:	False	
Source Field:	PartName	
Source Table:	DFMA criteria	
T	Text	50
AllowZeroLength:	False	
Attributes:	Variable Length	
Collating Order:	General	

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ColumnHidden: False
ColumnOrder: Default
ColumnWidth: 420
Description: Type
DisplayControl: Text Box
Ordinal Position: 4
Required: False
Source Field: T
Source Table: DFMA criteria

MinDimension Text 50

AllowZeroLength: False
Attributes: Variable Length
Collating Order: General
ColumnHidden: False
ColumnOrder: Default
ColumnWidth: Default
DisplayControl: Text Box
Ordinal Position: 5
Required: False
Source Field: MinDimension
Source Table: DFMA criteria

Wei Number (Double) 8

AllowZeroLength: False
Attributes: Fixed Size
Collating Order: General
ColumnHidden: True
ColumnOrder: Default
ColumnWidth: 945
Decimal Places: 2
Default Value: 0
DisplayControl: Text Box
Format: Fixed
Ordinal Position: 6
Required: False
Source Field: Wei
Source Table: DFMA criteria

MPQ Number (Long) 4

AllowZeroLength: False
Attributes: Fixed Size
Collating Order: General
ColumnHidden: True
ColumnOrder: Default
ColumnWidth: 600
Decimal Places: Auto
Default Value: 0
DisplayControl: Text Box
Ordinal Position: 7
Required: False
Source Field: MPQ
Source Table: DFMA criteria

MRD Text 14

AllowZeroLength: False
Attributes: Variable Length

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Collating Order:
ColumnHidden:
ColumnOrder:
ColumnWidth:
Description:
DisplayControl:
Ordinal Position:
Required:
Source Field:
Source Table:

General
True
Default
1020
Map Reference Designator
Text Box
8
False
MRD
DFMA criteria

Qty Number (Long) 4

AllowZeroLength:
Attributes:
Collating Order:
ColumnHidden:
ColumnOrder:
ColumnWidth:
Decimal Places:
Default Value:
DisplayControl:
Ordinal Position:
Required:
Source Field:
Source Table:

False
Fixed Size
General
True
Default
270
Auto
0
Text Box
9
False
Qty
DFMA criteria

InstPartNumber Text 50

AllowZeroLength:
Attributes:
Collating Order:
ColumnHidden:
ColumnOrder:
ColumnWidth:
DisplayControl:
Ordinal Position:
Required:
Source Field:
Source Table:

False
Variable Length
General
True
Default
1695
Text Box
10
False
InstPartNumber
DFMA criteria

InstPartName Text 50

AllowZeroLength:
Attributes:
Collating Order:
ColumnHidden:
ColumnOrder:
ColumnWidth:
DisplayControl:
Ordinal Position:
Required:
Source Field:
Source Table:

False
Variable Length
General
True
Default
1140
Text Box
11
False
InstPartName
DFMA criteria

MRDA Text 14

AllowZeroLength:
Attributes:
Collating Order:
ColumnHidden:

False
Variable Length
General
True

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60173718:123000

ColumnOrder:	Default
ColumnWidth:	945
Description:	Map Reference Designator Assembly
DisplayControl:	Text Box
Ordinal Position:	12
Required:	False
Source Field:	MRDA
Source Table:	DFMA criteria

Function		Text	50
----------	--	------	----

AllowZeroLength:	False
Attributes:	Variable Length
Collating Order:	General
ColumnHidden:	True
ColumnOrder:	Default
ColumnWidth:	2160
Description:	Fastening or securing, Connecting other items
DisplayControl:	Text Box
Ordinal Position:	13
Required:	False
Source Field:	Function
Source Table:	DFMA criteria

MinPartCriteria		Text	50
-----------------	--	------	----

AllowZeroLength:	False
Attributes:	Variable Length
Collating Order:	General
ColumnHidden:	True
ColumnOrder:	Default
ColumnWidth:	1980
Description:	Different material or physical separation,Relative movement, Assembly of necessary parts
DisplayControl:	Text Box
Ordinal Position:	14
Required:	False
Source Field:	MinPartCriteria
Source Table:	DFMA criteria

Envelope		Text	50
----------	--	------	----

AllowZeroLength:	False
Attributes:	Variable Length
Collating Order:	General
ColumnHidden:	False
ColumnOrder:	Default
ColumnWidth:	1350
Description:	Block, Disc, Flat, Long, Long Cylinder, Short Cylinder
DisplayControl:	Text Box
Ordinal Position:	15
Required:	False
Source Field:	Envelope
Source Table:	DFMA criteria

Alpha		Text	50
-------	--	------	----

AllowZeroLength:	False
Attributes:	Variable Length
Collating Order:	General

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ColumnHidden: True
ColumnOrder: Default
ColumnWidth: 720
Description: Insertion - alpha symmetry: one way 360, either way 180, any way 0-90

DisplayControl: Text Box
Ordinal Position: 16
Required: False
Source Field: Alpha
Source Table: DFMA criteria

Beta Text 50

AllowZeroLength: False
Attributes: Variable Length
Collating Order: General
ColumnHidden: True
ColumnOrder: Default
ColumnWidth: 720
Description: Orientation - beta symmetry: one way 360, either way 180, any way 0-90

DisplayControl: Text Box
Ordinal Position: 17
Required: False
Source Field: Beta
Source Table: DFMA criteria

Nest Text 50

AllowZeroLength: False
Attributes: Variable Length
Collating Order: General
ColumnHidden: True
ColumnOrder: Default
ColumnWidth: 555
DisplayControl: Text Box
Ordinal Position: 18
Required: False
Source Field: Nest
Source Table: DFMA criteria

NestSev Text 50

AllowZeroLength: False
Attributes: Variable Length
Collating Order: General
ColumnHidden: True
ColumnOrder: Default
ColumnWidth: 915
DisplayControl: Text Box
Ordinal Position: 19
Required: False
Source Field: NestSev
Source Table: DFMA criteria

Flexibility Text 50

AllowZeroLength: False
Attributes: Variable Length
Collating Order: General

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	ColumnHidden:	True		
	ColumnOrder:	Default		
	ColumnWidth:	1095		
	DisplayControl:	Text Box		
	Ordinal Position:	20		
	Required:	False		
	Source Field:	Flexibility		
	Source Table:	DFMA criteria		
Sticky	AllowZeroLength:	False	Text	50
	Attributes:	Variable Length		
	Collating Order:	General		
	ColumnHidden:	True		
	ColumnOrder:	Default		
	ColumnWidth:	720		
	DisplayControl:	Text Box		
	Ordinal Position:	21		
	Required:	False		
	Source Field:	Sticky		
	Source Table:	DFMA criteria		
Fragility	AllowZeroLength:	False	Text	50
	Attributes:	Variable Length		
	Collating Order:	General		
	ColumnHidden:	True		
	ColumnOrder:	Default		
	ColumnWidth:	930		
	DisplayControl:	Text Box		
	Ordinal Position:	22		
	Required:	False		
	Source Field:	Fragility		
	Source Table:	DFMA criteria		
Slippery	AllowZeroLength:	False	Text	50
	Attributes:	Variable Length		
	Collating Order:	General		
	ColumnHidden:	True		
	ColumnOrder:	Default		
	ColumnWidth:	945		
	DisplayControl:	Text Box		
	Ordinal Position:	23		
	Required:	False		
	Source Field:	Slippery		
	Source Table:	DFMA criteria		
Sharp	AllowZeroLength:	False	Text	50
	Attributes:	Variable Length		
	Collating Order:	General		
	ColumnHidden:	True		
	ColumnOrder:	Default		
	ColumnWidth:	720		
	DisplayControl:	Text Box		
	Ordinal Position:	24		

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	Required:	False		
	Source Field:	Sharp		
	Source Table:	DFMA criteria		
Bulky			Text	50
	AllowZeroLength:	False		
	Attributes:	Variable Length		
	Collating Order:	General		
	ColumnHidden:	True		
	ColumnOrder:	Default		
	ColumnWidth:	1545		
	DisplayControl:	Text Box		
	Ordinal Position:	25		
	Required:	False		
	Source Field:	Bulky		
	Source Table:	DFMA criteria		
Tweezers			Text	50
	AllowZeroLength:	False		
	Attributes:	Variable Length		
	Collating Order:	General		
	ColumnHidden:	True		
	ColumnOrder:	Default		
	ColumnWidth:	810		
	Description:	Tweezers is needed		
	DisplayControl:	Text Box		
	Ordinal Position:	26		
	Required:	False		
	Source Field:	Tweezers		
	Source Table:	DFMA criteria		
GraspTools			Text	50
	AllowZeroLength:	False		
	Attributes:	Variable Length		
	Collating Order:	General		
	ColumnHidden:	True		
	ColumnOrder:	Default		
	ColumnWidth:	1320		
	Description:	Other grasping tools		
	DisplayControl:	Text Box		
	Ordinal Position:	27		
	Required:	False		
	Source Field:	GraspTools		
	Source Table:	DFMA criteria		
Optica			Text	50
	AllowZeroLength:	False		
	Attributes:	Variable Length		
	Collating Order:	General		
	ColumnHidden:	True		
	ColumnOrder:	Default		
	ColumnWidth:	1440		
	Description:	Magnifier		
	DisplayControl:	Text Box		
	Ordinal Position:	28		
	Required:	False		
	Source Field:	Optica		

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Source Table:	DFMA criteria		
Twohands		Text	50
AllowZeroLength:	False		
Attributes:	Variable Length		
Collating Order:	General		
ColumnHidden:	True		
ColumnOrder:	Default		
ColumnWidth:	1125		
Description:	Two hands		
DisplayControl:	Text Box		
Ordinal Position:	29		
Required:	False		
Source Field:	Twohands		
Source Table:	DFMA criteria		
Twopeople		Text	50
AllowZeroLength:	False		
Attributes:	Variable Length		
Collating Order:	General		
ColumnHidden:	True		
ColumnOrder:	Default		
ColumnWidth:	1215		
Description:	Two people		
DisplayControl:	Text Box		
Ordinal Position:	30		
Required:	False		
Source Field:	Twopeople		
Source Table:	DFMA criteria		
Crane		Text	50
AllowZeroLength:	False		
Attributes:	Variable Length		
Collating Order:	General		
ColumnHidden:	True		
ColumnOrder:	Default		
ColumnWidth:	1260		
Description:	No mechanical handling, Fixed crane, Mobile crane, Large crane		
DisplayControl:	Text Box		
Ordinal Position:	31		
Required:	False		
Source Field:	Crane		
Source Table:	DFMA criteria		
View		Text	50
AllowZeroLength:	False		
Attributes:	Variable Length		
Collating Order:	General		
ColumnHidden:	True		
ColumnOrder:	Default		
ColumnWidth:	1020		
Description:	View		
DisplayControl:	Text Box		
Ordinal Position:	32		
Required:	False		
Source Field:	View		
Source Table:	DFMA criteria		

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Access	AllowZeroLength: False Attributes: Variable Length Collating Order: General ColumnHidden: True ColumnOrder: Default ColumnWidth: 1290 Description: Access DisplayControl: Text Box Ordinal Position: 33 Required: False Source Field: Access Source Table: DFMA criteria	Text	50
Alignment	AllowZeroLength: False Attributes: Variable Length Collating Order: General ColumnHidden: True ColumnOrder: Default ColumnWidth: 1320 Description: Not easy to align or position DisplayControl: Text Box Ordinal Position: 34 Required: False Source Field: Alignment Source Table: DFMA criteria	Text	50
Resistance	AllowZeroLength: False Attributes: Variable Length Collating Order: General ColumnHidden: True ColumnOrder: Default ColumnWidth: 1380 Description: Resistance DisplayControl: Text Box Ordinal Position: 35 Required: False Source Field: Resistance Source Table: DFMA criteria	Text	50
InsertionDif	AllowZeroLength: False Attributes: Variable Length Collating Order: General ColumnHidden: True ColumnOrder: Default ColumnWidth: Default Description: Severe insertion difficulties DisplayControl: Text Box Ordinal Position: 36 Required: False Source Field: InsertionDif Source Table: DFMA criteria	Text	50
Holding		Text	50

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AllowZeroLength: False
Attributes: Variable Length
Collating Order: General
ColumnHidden: True
ColumnOrder: Default
ColumnWidth: 885
Description: Holding down required
DisplayControl: Text Box
Ordinal Position: 37
Required: False
Source Field: Holding
Source Table: DFMA criteria

Regrasping Text 50

AllowZeroLength: False
Attributes: Variable Length
Collating Order: General
ColumnHidden: True
ColumnOrder: Default
ColumnWidth: 1230
Description: Regrasping required prior to insertion
DisplayControl: Text Box
Ordinal Position: 38
Required: False
Source Field: Regrasping
Source Table: DFMA criteria

Supporting Text 50

AllowZeroLength: False
Attributes: Variable Length
Collating Order: General
ColumnHidden: True
ColumnOrder: Default
ColumnWidth: Default
Description: Supporting of weight required during insertion
DisplayControl: Text Box
Ordinal Position: 39
Required: False
Source Field: Supporting
Source Table: DFMA criteria

Depth Text 50

AllowZeroLength: False
Attributes: Variable Length
Collating Order: General
ColumnHidden: True
ColumnOrder: Default
ColumnWidth: 1440
Description: Large depth of insertion
DisplayControl: Text Box
Ordinal Position: 40
Required: False
Source Field: Depth
Source Table: DFMA criteria

PartFetch Text 50

AllowZeroLength: False

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Attributes:	Variable Length
Collating Order:	General
ColumnHidden:	True
ColumnOrder:	Default
ColumnWidth:	2385
Description:	Approximate Part Fetch distance, inch
DisplayControl:	Text Box
Ordinal Position:	41
Required:	False
Source Field:	PartFetch
Source Table:	DFMA criteria

ToolFetch	Text	50
-----------	------	----

AllowZeroLength:	False
Attributes:	Variable Length
Collating Order:	General
ColumnHidden:	True
ColumnOrder:	Default
ColumnWidth:	2385
Description:	Approximate Tool Fetch distance, inch
DisplayControl:	Text Box
Ordinal Position:	42
Required:	False
Source Field:	ToolFetch
Source Table:	DFMA criteria

Table Indexes

Name	Number of Fields
MRD	1
Clustered:	False
Distinct Count:	6573
Foreign:	False
Ignore Nulls:	False
Name:	MRD
Primary:	False
Required:	False
Unique:	False
Fields:	MRD, Ascending
MRDA	1
Clustered:	False
Distinct Count:	1946
Foreign:	False
Ignore Nulls:	False
Name:	MRDA
Primary:	False
Required:	False
Unique:	False
Fields:	MRDA, Ascending
PrimaryKey	4
Clustered:	False
Distinct Count:	7277
Foreign:	False
Ignore Nulls:	False
Name:	PrimaryKey

Primary:	True
Required:	True
Unique:	True
Fields:	DwgNumber, Ascending PartNumber, Ascending MPQ, Ascending InstPartNumber, Ascending

User Permissions

admin

Group Permissions

Admins
Users

Properties

Date Created:	3/18/99 5:06:54 PM	Def. Updatable:	False
Last Updated:	4/5/99 1:16:04 AM	OrderByOn:	False
Orientation:	0	RecordCount:	130

Columns

Name	Type	Size
Nu	Number (Long)	4
AllowZeroLength: False Attributes: Fixed Size Collating Order: General ColumnHidden: False ColumnOrder: Default ColumnWidth: 405 Decimal Places: Auto Default Value: 0 DisplayControl: Text Box Ordinal Position: 1 Required: False Source Field: Nu Source Table: DFMA operation		
Operation	Text	50
AllowZeroLength: False Attributes: Variable Length Collating Order: General ColumnHidden: False ColumnOrder: Default ColumnWidth: 2700 DisplayControl: Text Box Ordinal Position: 2 Required: False Source Field: Operation Source Table: DFMA operation		
Tool	Text	50
AllowZeroLength: False Attributes: Variable Length Collating Order: General ColumnHidden: False ColumnOrder: Default ColumnWidth: 1065 DisplayControl: Text Box Ordinal Position: 3 Required: False Source Field: Tool Source Table: DFMA operation		
N	Number (Long)	4
AllowZeroLength: False Attributes: Fixed Size Collating Order: General		

ColumnHidden: False
ColumnOrder: Default
ColumnWidth: 285
Decimal Places: Auto
Default Value: 0
DisplayControl: Text Box
Ordinal Position: 4
Required: False
Source Field: N
Source Table: DFMA operation

ID Number (Long) 4

AllowZeroLength: False
Attributes: Fixed Size
Collating Order: General
ColumnHidden: False
ColumnOrder: Default
ColumnWidth: 570
Decimal Places: Auto
Default Value: 0
DisplayControl: Text Box
Ordinal Position: 5
Required: False
Source Field: ID
Source Table: DFMA operation

Definition Text 255

AllowZeroLength: False
Attributes: Variable Length
Collating Order: General
ColumnHidden: False
ColumnOrder: Default
ColumnWidth: 3825
DisplayControl: Text Box
Ordinal Position: 6
Required: False
Source Field: Definition
Source Table: DFMA operation

Table Indexes

Name	Number of Fields
ID	1
Clustered:	False
Distinct Count:	130
Foreign:	False
Ignore Nulls:	False
Name:	ID
Primary:	False
Required:	False
Unique:	False
Fields:	ID, Ascending
PrimaryKey	2
Clustered:	False
Distinct Count:	130

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Foreign:	False
Ignore Nulls:	False
Name:	PrimaryKey
Primary:	True
Required:	True
Unique:	True
Fields:	Nu, Ascending
	N, Ascending

admin

Admins
Users

THE **WORLD'S** **LARGEST** **BOOKSTORE**

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Properties

Date Created: 4/4/99 10:31:31 PM
Last Updated: 5/12/99 6:38:56 PM
Orientation: 0

Def. Updatable: False
OrderByOn: False
RecordCount: 10352

Columns

Name	Type	Size
PartNumber	Text	50
AllowZeroLength:	False	
Attributes:	Variable Length	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	Default	
ColumnWidth:	Default	
Description:	Part Number	
DisplayControl:	Text Box	
Ordinal Position:	1	
Required:	False	
Source Field:	PartNumber	
Source Table:	DFMA rout card	
Item	Number (Long)	4
AllowZeroLength:	False	
Attributes:	Fixed Size	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	Default	
ColumnWidth:	570	
Decimal Places:	Auto	
Default Value:	2	
Description:	Item	
DisplayControl:	Text Box	
Ordinal Position:	2	
Required:	False	
Source Field:	Item	
Source Table:	DFMA rout card	
Status	Text	50
AllowZeroLength:	False	
Attributes:	Variable Length	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	Default	
ColumnWidth:	Default	
Description:	Operation status: Is not secured on insertion or Is secured on insertion	
DisplayControl:	Text Box	
Ordinal Position:	3	
Required:	False	
Source Field:	Status	
Source Table:	DFMA rout card	

SecuringOperation	Text	50
AllowZeroLength:	False	
Attributes:	Variable Length	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	Default	
ColumnWidth:	1950	
Description:	Separate operation, separate fastening, permanent fastening, snap/push/press/interference fit	
DisplayControl:	Text Box	
Ordinal Position:	4	
Required:	False	
Source Field:	SecuringOperation	
Source Table:	DFMA rout card	
SecuringType	Text	50
AllowZeroLength:	False	
Attributes:	Variable Length	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	Default	
ColumnWidth:	Default	
Description:	Friction connector, Latch, Snap, Quick connect, Ring lug with screw, Secure and solder, Bayonet, Spring clip, Wire wrap, Fork or ring with nut, Screw, Two screws, Fork lug with screw, Wire with screw	
DisplayControl:	Text Box	
Ordinal Position:	5	
Required:	False	
Source Field:	SecuringType	
Source Table:	DFMA rout card	
ToolUse	Text	50
AllowZeroLength:	False	
Attributes:	Variable Length	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	Default	
ColumnWidth:	Default	
Description:	No power tool or power tool	
DisplayControl:	Text Box	
Ordinal Position:	6	
Required:	False	
Source Field:	ToolUse	
Source Table:	DFMA rout card	
ToolType	Text	50
AllowZeroLength:	False	
Attributes:	Variable Length	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	Default	
ColumnWidth:	1035	
Description:	Power tool or hand tool	
DisplayControl:	Text Box	
Ordinal Position:	7	

Required:	False		
Source Field:	ToolType		
Source Table:	DFMA rout card		
ToolCharacter		Text	50
AllowZeroLength:	False		
Attributes:	Variable Length		
Collating Order:	General		
ColumnHidden:	False		
ColumnOrder:	Default		
ColumnWidth:	Default		
Description:	Power tool-fastener autofed/inserted manually,Hand tool-nut driver,screwdriver or ratchet wrench,Hand tighten-no tool used		
DisplayControl:	Text Box		
Ordinal Position:	8		
Required:	False		
Source Field:	ToolCharacter		
Source Table:	DFMA rout card		
ToolRevolutions		Text	50
AllowZeroLength:	False		
Attributes:	Variable Length		
Collating Order:	General		
ColumnHidden:	False		
ColumnOrder:	Default		
ColumnWidth:	930		
Description:	Number of revolutions		
DisplayControl:	Text Box		
Ordinal Position:	9		
Required:	False		
Source Field:	ToolRevolutions		
Source Table:	DFMA rout card		
ToolTime		Number (Double)	8
AllowZeroLength:	False		
Attributes:	Fixed Size		
Collating Order:	General		
ColumnHidden:	False		
ColumnOrder:	Default		
ColumnWidth:	600		
Decimal Places:	2		
Default Value:	0		
Description:	Tool fetching time, sec		
DisplayControl:	Text Box		
Format:	Fixed		
Ordinal Position:	10		
Required:	False		
Source Field:	ToolTime		
Source Table:	DFMA rout card		
HandleTime		Number (Double)	8
AllowZeroLength:	False		
Attributes:	Fixed Size		
Collating Order:	General		
ColumnHidden:	False		
ColumnOrder:	Default		

ColumnWidth:	465
Decimal Places:	2
Default Value:	0
Description:	Handling time, sec
DisplayControl:	Text Box
Format:	Fixed
Ordinal Position:	11
Required:	False
Source Field:	HandleTime
Source Table:	DFMA rout card

Table Indexes

Name	Number of Fields
PrimaryKey	2
Clustered:	False
Distinct Count:	10352
Foreign:	False
Ignore Nulls:	False
Name:	PrimaryKey
Primary:	True
Required:	True
Unique:	True
Fields:	PartNumber, Ascending Item, Ascending

User Permissions

admin

Group Permissions

Admins
Users

50172748-122000

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Properties

Date Created: 4/27/98 8:25:04 PM
Last Updated: 6/29/99 11:07:05 PM
Orientation: 0

Def. Updatable: False
OrderByOn: False
RecordCount: 393

Columns

Name	Type	Size
Door	Text	50
AllowZeroLength:	False	
Attributes:	Variable Length	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	Default	
ColumnWidth:	795	
Description:	Door	
DisplayControl:	Text Box	
Ordinal Position:	1	
Required:	False	
Source Field:	Door	
Source Table:	Door	
MRD	Text	14
AllowZeroLength:	False	
Attributes:	Variable Length	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	Default	
ColumnWidth:	1080	
Description:	Map Reference Designator	
DisplayControl:	Text Box	
Ordinal Position:	2	
Required:	False	
Source Field:	MRD	
Source Table:	Door	
MapDwgNumber	Text	50
AllowZeroLength:	False	
Attributes:	Variable Length	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	Default	
ColumnWidth:	Default	
Description:	Map Drawing Number	
DisplayControl:	Text Box	
Ordinal Position:	5	
Required:	True	
Source Field:	MapDwgNumber	
Source Table:	Door	
ReportNumber	Text	50
AllowZeroLength:	False	
Attributes:	Variable Length	

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Collating Order:	General
ColumnHidden:	False
ColumnOrder:	Default
ColumnWidth:	Default
Description:	Access Door Report Number
DisplayControl:	Text Box
Ordinal Position:	6
Required:	True
Source Field:	ReportNumber
Source Table:	Door

Notes

AllowZeroLength:	False
Attributes:	Variable Length
Collating Order:	General
ColumnHidden:	False
ColumnOrder:	Default
ColumnWidth:	4260
Description:	Notes
DisplayControl:	Text Box
Ordinal Position:	7
Required:	False
Source Field:	Notes
Source Table:	Door

Text

255

Relationships

DoorBay and Door

Door	Bay and Door
Door	1 ∞ Door
Attributes:	Enforced
Attributes:	One-To-Many

DoorDoor attachment

Door	Door attachment
Door	1 ∞ Door
Attributes:	Enforced
Attributes:	One-To-Many

DrawingsDoor

Drawings	Door
DwgNumber	1 ∞ MapDwgNumber
Attributes:	Enforced
Attributes:	One-To-Many

MRDDoor

MRD	Door
MRD	1 1 MRD
Attributes:	Unique, Enforced
Attributes:	One-To-One

ReportsDoor

Reports	Door
ReportNumber	1 ∞ ReportNumber
Attributes:	Enforced
Attributes:	One-To-Many

Table Indexes

Name	Number of Fields
DrawingsDoor	1
Clustered:	False
Distinct Count:	1
Foreign:	True
Ignore Nulls:	False
Name:	DrawingsDoor
Primary:	False
Required:	False
Unique:	False
Fields:	MapDwgNumber, Ascending
MapDwgNumber	1
Clustered:	False
Distinct Count:	1
Foreign:	False
Ignore Nulls:	False
Name:	MapDwgNumber
Primary:	False
Required:	False
Unique:	False
Fields:	MapDwgNumber, Ascending
MRD	1

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Clustered:	False
Distinct Count:	393
Foreign:	False
Ignore Nulls:	False
Name:	MRD
Primary:	False
Required:	False
Unique:	True
Fields:	MRD, Ascending
MRDDoor	1
Clustered:	False
Distinct Count:	393
Foreign:	True
Ignore Nulls:	False
Name:	MRDDoor
Primary:	False
Required:	False
Unique:	True
Fields:	MRD, Ascending
PrimaryKey	1
Clustered:	False
Distinct Count:	393
Foreign:	False
Ignore Nulls:	False
Name:	PrimaryKey
Primary:	True
Required:	True
Unique:	True
Fields:	Door, Ascending
ReportNumber	1
Clustered:	False
Distinct Count:	1
Foreign:	False
Ignore Nulls:	False
Name:	ReportNumber
Primary:	False
Required:	False
Unique:	False
Fields:	ReportNumber, Ascending
ReportsDoor	1
Clustered:	False
Distinct Count:	1
Foreign:	True
Ignore Nulls:	False
Name:	ReportsDoor
Primary:	False
Required:	False
Unique:	False
Fields:	ReportNumber, Ascending

User Permissions

admin

Group Permissions

Admins
Users

[illegible]

A-94

Properties

Date Created:	2/27/99 12:32:09 AM	Def. Updatable:	False
Last Updated:	2/28/99 5:26:42 PM	OrderByOn:	False
Orientation:	0	RecordCount:	393

Columns

Name	Type	Size
Door	Text	50
AllowZeroLength:	False	
Attributes:	Variable Length	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	Default	
ColumnWidth:	Default	
Description:	Door number	
DisplayControl:	Text Box	
Ordinal Position:	1	
Required:	False	
Source Field:	Door	
Source Table:	Door attachment	
PartNumber	Text	50
AllowZeroLength:	False	
Attributes:	Variable Length	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	Default	
ColumnWidth:	1695	
Description:	Part Number	
DisplayControl:	Text Box	
Ordinal Position:	2	
Required:	True	
Source Field:	PartNumber	
Source Table:	Door attachment	
DoorAttachment	Text	50
AllowZeroLength:	False	
Attributes:	Variable Length	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	Default	
ColumnWidth:	2370	
Description:	Door Attachment	
DisplayControl:	Text Box	
Ordinal Position:	3	
Required:	False	
Source Field:	DoorAttachment	
Source Table:	Door attachment	

Relationships

A-95

DoorDoor attachment

Door	Door attachment
Door	1 ∞ Door
Attributes:	Enforced
Attributes:	One-To-Many

PartsDoor attachment

Parts	Door attachment
PartNumber	1 ∞ PartNumber
Attributes:	Enforced
Attributes:	One-To-Many

Table Indexes

Name	Number of Fields
DoorDoor attachment	1
Clustered:	False
Distinct Count:	393
Foreign:	True
Ignore Nulls:	False
Name:	DoorDoor attachment
Primary:	False
Required:	False
Unique:	False
Fields:	Door, Ascending
PartsDoor attachment	1
Clustered:	False
Distinct Count:	393
Foreign:	True
Ignore Nulls:	False
Name:	PartsDoor attachment
Primary:	False
Required:	False
Unique:	False
Fields:	PartNumber, Ascending
PrimaryKey	2
Clustered:	False
Distinct Count:	393
Foreign:	False
Ignore Nulls:	False
Name:	PrimaryKey
Primary:	True
Required:	True
Unique:	True

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Fields:

Door, Ascending
PartNumber, Ascending

User Permissions

admin

Group Permissions

Admins
Users

[illegible]

Properties

Date Created: 4/26/98 8:21:02 PM
Last Updated: 6/29/99 11:28:57 PM
OrderByOn: True
RecordCount: 4629

Def. Updatable: False
OrderBy: Drawings.DwgNumber
Orientation: 0

Columns

Name	Type	Size
DwgNumber	Text	50
AllowZeroLength:	False	
Attributes:	Variable Length	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	1	
ColumnWidth:	1320	
Description:	Drawing Number	
DisplayControl:	Text Box	
Ordinal Position:	1	
Required:	False	
Source Field:	DwgNumber	
Source Table:	Drawings	
DwgName	Text	50
AllowZeroLength:	False	
Attributes:	Variable Length	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	Default	
ColumnWidth:	4875	
Description:	Drawing Name	
DisplayControl:	Text Box	
Ordinal Position:	2	
Required:	False	
Source Field:	DwgName	
Source Table:	Drawings	
T	Text	50
AllowZeroLength:	False	
Attributes:	Variable Length	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	Default	
ColumnWidth:	450	
Description:	Drawing Type (Vendor, Control, Dimensional, Undimensional)	
DisplayControl:	Text Box	
Ordinal Position:	3	
Required:	False	
Source Field:	T	
Source Table:	Drawings	
Sh	Number (Long)	4
AllowZeroLength:	False	

A-98

Fixed Size
General
False
Default
405
Auto
0
Sheets Number
Text Box
4
False
Sh
Drawings

Text 50

False
Variable Length
General
False
Default
420
Drawing Format
Text Box
5
False
Form
Drawings

Text	50
------	----

False
Variable Length
General
False
Default
390
Revision
Text Box
6
False
Iss
Drawings

Number (Long)	4
---------------	---

False
Fixed Size
General
False
Default
645
Auto
0
Department Number
Text Box
7
False
Dept
Drawings

A-99

IDesigner	AllowZeroLength: False Attributes: Fixed Size Collating Order: General ColumnHidden: False ColumnOrder: Default ColumnWidth: 1050 Decimal Places: Auto Default Value: 0 Description: Identification Number DisplayControl: Text Box Ordinal Position: 8 Required: False Source Field: IDesigner Source Table: Drawings	Number (Long)	4
Date	AllowZeroLength: False Attributes: Fixed Size Collating Order: General ColumnHidden: False ColumnOrder: Default ColumnWidth: 1035 Description: Date Format: Medium Date Ordinal Position: 9 Required: False Source Field: Date Source Table: Drawings	Date/Time	8
Update	AllowZeroLength: False Attributes: Fixed Size Collating Order: General ColumnHidden: False ColumnOrder: Default ColumnWidth: 1020 Description: Update Format: Medium Date Ordinal Position: 10 Required: False Source Field: Update Source Table: Drawings	Date/Time	8
WBS	AllowZeroLength: False Attributes: Fixed Size Collating Order: General ColumnHidden: False ColumnOrder: Default ColumnWidth: 675 Decimal Places: Auto Default Value: 0 Description: Work Breaking Structure DisplayControl: Text Box Ordinal Position: 11 Required: False	Number (Long)	4

A-100

Source Field:	WBS		
Source Table:	Drawings		
WorkOrder		Number (Long)	4
AllowZeroLength:	False		
Attributes:	Fixed Size		
Collating Order:	General		
ColumnHidden:	False		
ColumnOrder:	Default		
ColumnWidth:	1185		
Decimal Places:	Auto		
Default Value:	0		
Description:	WorkOrder		
DisplayControl:	Text Box		
Ordinal Position:	12		
Required:	False		
Source Field:	WorkOrder		
Source Table:	Drawings		
Time		Number (Double)	8
AllowZeroLength:	False		
Attributes:	Fixed Size		
Collating Order:	General		
ColumnHidden:	False		
ColumnOrder:	Default		
ColumnWidth:	630		
Decimal Places:	1		
Default Value:	0		
Description:	Time, in hours		
DisplayControl:	Text Box		
Ordinal Position:	13		
Required:	False		
Source Field:	Time		
Source Table:	Drawings		

Relationships

DrawingsAssembly

	Drawings		Assembly
	DwgNumber	1	∞ DwgNumber
Attributes:			Enforced
Attributes:			One-To-Many

DrawingsDoor

	Drawings		Door
	DwgNumber	1	∞ MapDwgNumber
Attributes:			Enforced
Attributes:			One-To-Many

A-101

DrawingsDrawings order

Drawings	Drawings order
DwgNumber	1 ∞ DwgNumber
Attributes:	Enforced
Attributes:	One-To-Many

DrawingsMRD

Drawings	MRD
DwgNumber	1 ∞ MapDwgNumber
Attributes:	Enforced
Attributes:	One-To-Many

PersonnelDrawings

Personnel	Drawings
ID	1 ∞ IDesigner
Attributes:	Enforced
Attributes:	One-To-Many

WBSDrawings

WBS	Drawings
WBS	1 ∞ WBS
Attributes:	Enforced
Attributes:	One-To-Many

Table Indexes

Name	Number of Fields
ID	1
Clustered:	False
Distinct Count:	377
Foreign:	False
Ignore Nulls:	False
Name:	ID
Primary:	False
Required:	False
Unique:	False
Fields:	IDesigner, Ascending
PersonnelDrawings	1

A-102

C:\WINDOWS\DESKTOP\DP.M.mdb
Table: Drawings

Clustered:	False
Distinct Count:	377
Foreign:	True
Ignore Nulls:	False
Name:	PersonnelDrawings
Primary:	False
Required:	False
Unique:	False
Fields:	IDesigner, Ascending
PrimaryKey	1
Clustered:	False
Distinct Count:	4629
Foreign:	False
Ignore Nulls:	False
Name:	PrimaryKey
Primary:	True
Required:	True
Unique:	True
Fields:	DwgNumber, Ascending
WBS	1
Clustered:	False
Distinct Count:	275
Foreign:	False
Ignore Nulls:	False
Name:	WBS
Primary:	False
Required:	False
Unique:	False
Fields:	WBS, Ascending
WBSDrawings	1
Clustered:	False
Distinct Count:	275
Foreign:	True
Ignore Nulls:	False
Name:	WBSDrawings
Primary:	False
Required:	False
Unique:	False
Fields:	WBS, Ascending

User Permissions

admin

Group Permissions

Admins
Users

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Properties

Date Created:	10/31/98 1:21:07 AM	Def. Updatable:	False
Last Updated:	6/29/99 10:19:28 PM	OrderByOn:	False
Orientation:	0	RecordCount:	25473

Columns

Name		Type	Size
DwgNumber		Text	50
AllowZeroLength:	False		
Attributes:	Variable Length		
Collating Order:	General		
ColumnHidden:	False		
ColumnOrder:	Default		
ColumnWidth:	1320		
Description:	Drawing Number		
DisplayControl:	Text Box		
Ordinal Position:	0		
Required:	False		
Source Field:	DwgNumber		
Source Table:	Drawings order		
Iss		Text	50
AllowZeroLength:	False		
Attributes:	Variable Length		
Collating Order:	General		
ColumnHidden:	False		
ColumnOrder:	Default		
ColumnWidth:	510		
Description:	Revision		
DisplayControl:	Text Box		
Ordinal Position:	2		
Required:	False		
Source Field:	Iss		
Source Table:	Drawings order		
Discipline		Text	50
AllowZeroLength:	False		
Attributes:	Variable Length		
Collating Order:	General		
ColumnHidden:	False		
ColumnOrder:	Default		
ColumnWidth:	1260		
Description:	Discipline		
DisplayControl:	Text Box		
Ordinal Position:	3		
Required:	False		
Source Field:	Discipline		
Source Table:	Drawings order		
IDesigner		Number (Long)	4
AllowZeroLength:	False		
Attributes:	Fixed Size		

A-104

Collating Order: General
ColumnHidden: False
ColumnOrder: Default
ColumnWidth: 1050
Decimal Places: Auto
Default Value: 0
Description: Identification Number
DisplayControl: Text Box
Ordinal Position: 4
Required: False
Source Field: IDesigner
Source Table: Drawings order

Date	AllowZeroLength: False	Date/Time	8
	Attributes: Fixed Size		
	Collating Order: General		
	ColumnHidden: False		
	ColumnOrder: Default		
	ColumnWidth: 1065		
	Description: Update		
	Format: Medium Date		
	Ordinal Position: 13		
	Required: False		
	Source Field: Date		
	Source Table: Drawings order		

Relationships

DrawingsDrawings order

Drawings	Drawings order
DwgNumber	1 ∞ DwgNumber
Attributes:	Enforced
Attributes:	One-To-Many

PersonnelDrawings order

Personnel	Drawings order
ID	1 ∞ IDesigner
Attributes:	Enforced
Attributes:	One-To-Many

Table Indexes

Name	Number of Fields
DrawingsDrawings order	1
Clustered:	False
Distinct Count:	4148

Foreign:	True
Ignore Nulls:	False
Name:	DrawingsDrawings order
Primary:	False
Required:	False
Unique:	False
Fields:	DwgNumber, Ascending
PersonnelDrawings order	1
Clustered:	False
Distinct Count:	528
Foreign:	True
Ignore Nulls:	False
Name:	PersonnelDrawings order
Primary:	False
Required:	False
Unique:	False
Fields:	IDesigner, Ascending
PrimaryKey	4
Clustered:	False
Distinct Count:	25473
Foreign:	False
Ignore Nulls:	False
Name:	PrimaryKey
Primary:	True
Required:	True
Unique:	True
Fields:	DwgNumber, Ascending Iss, Ascending Discipline, Ascending IDesigner, Ascending

User Permissions

admin

Group Permissions

Admins
Users

A-106

Properties

Date Created:	10/27/98 11:17:11 PM	Def. Updatable:	False
Last Updated:	10/31/98 1:20:42 AM	OrderByOn:	False
Orientation:	0	RecordCount:	4148

Columns

Name	Type	Size
DwgNumber	Text	50
AllowZeroLength:	False	
Attributes:	Variable Length	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	Default	
ColumnWidth:	1320	
Description:	Drawing Number	
DisplayControl:	Text Box	
Ordinal Position:	1	
Required:	False	
Source Field:	DwgNumber	
Source Table:	Drawings release	
DwgName	Text	50
AllowZeroLength:	False	
Attributes:	Variable Length	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	Default	
ColumnWidth:	2835	
Description:	Drawing Name	
DisplayControl:	Text Box	
Ordinal Position:	2	
Required:	False	
Source Field:	DwgName	
Source Table:	Drawings release	
Rev	Text	50
AllowZeroLength:	False	
Attributes:	Variable Length	
Collating Order:	General	
ColumnHidden:	True	
ColumnOrder:	Default	
ColumnWidth:	510	
Description:	Revision	
DisplayControl:	Text Box	
Ordinal Position:	4	
Required:	False	
Source Field:	Rev	
Source Table:	Drawings release	
Discipline	Text	50
AllowZeroLength:	False	
Attributes:	Variable Length	

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Collating Order:	General
ColumnHidden:	True
ColumnOrder:	Default
ColumnWidth:	1080
Description:	Discipline
DisplayControl:	Text Box
Ordinal Position:	5
Required:	False
Source Field:	Discipline
Source Table:	Drawings release

IDesigner		Number (Long)	4
AllowZeroLength:	False		
Attributes:	Fixed Size		
Collating Order:	General		
ColumnHidden:	True		
ColumnOrder:	Default		
ColumnWidth:	1050		
Decimal Places:	Auto		
Default Value:	0		
Description:	Identification Number		
DisplayControl:	Text Box		
Ordinal Position:	6		
Required:	False		
Source Field:	IDesigner		
Source Table:	Drawings release		

MID		Number (Long)	4
AllowZeroLength:	False		
Attributes:	Fixed Size		
Collating Order:	General		
ColumnHidden:	False		
ColumnOrder:	Default		
ColumnWidth:	990		
Decimal Places:	Auto		
Default Value:	0		
Description:	Manager Identification Number		
DisplayControl:	Text Box		
Ordinal Position:	7		
Required:	False		
Source Field:	MID		
Source Table:	Drawings release		

PID		Number (Long)	4
AllowZeroLength:	False		
Attributes:	Fixed Size		
Collating Order:	General		
ColumnHidden:	False		
ColumnOrder:	Default		
ColumnWidth:	1110		
Decimal Places:	Auto		
Default Value:	0		
Description:	Project Engineer Identification Number		
DisplayControl:	Text Box		
Ordinal Position:	8		
Required:	False		
Source Field:	PID		

Source Table:		Drawings release	
SID		Number (Long)	4
AllowZeroLength:	False		
Attributes:	Fixed Size		
Collating Order:	General		
ColumnHidden:	False		
ColumnOrder:	Default		
ColumnWidth:	1140		
Decimal Places:	Auto		
Default Value:	0		
Description:	Stress Engineer Identification Number		
DisplayControl:	Text Box		
Ordinal Position:	9		
Required:	False		
Source Field:	SID		
Source Table:	Drawings release		
MatID		Number (Long)	4
AllowZeroLength:	False		
Attributes:	Fixed Size		
Collating Order:	General		
ColumnHidden:	False		
ColumnOrder:	Default		
ColumnWidth:	1275		
Decimal Places:	Auto		
Default Value:	0		
Description:	Material Engineer Identification Number		
DisplayControl:	Text Box		
Ordinal Position:	10		
Required:	False		
Source Field:	MatID		
Source Table:	Drawings release		
WID		Number (Long)	4
AllowZeroLength:	False		
Attributes:	Fixed Size		
Collating Order:	General		
ColumnHidden:	False		
ColumnOrder:	Default		
ColumnWidth:	1440		
Decimal Places:	Auto		
Default Value:	0		
Description:	Weight Engineer Identification Number		
DisplayControl:	Text Box		
Ordinal Position:	11		
Required:	False		
Source Field:	WID		
Source Table:	Drawings release		
MainID		Number (Long)	4
AllowZeroLength:	False		
Attributes:	Fixed Size		
Collating Order:	General		
ColumnHidden:	False		
ColumnOrder:	Default		
ColumnWidth:	1320		

Decimal Places: Auto
Default Value: 0
Description: Maintenance Engineer Identification Number
DisplayControl: Text Box
Ordinal Position: 12
Required: False
Source Field: MainID
Source Table: Drawings release

ManufID Number (Long) 4

AllowZeroLength: False
Attributes: Fixed Size
Collating Order: General
ColumnHidden: False
ColumnOrder: Default
ColumnWidth: 990
Decimal Places: Auto
Default Value: 0
Description: Manufacture Engineer Identification Number
DisplayControl: Text Box
Ordinal Position: 13
Required: False
Source Field: ManufID
Source Table: Drawings release

Dept Number (Long) 4

AllowZeroLength: False
Attributes: Fixed Size
Collating Order: General
ColumnHidden: True
ColumnOrder: Default
ColumnWidth: 585
Decimal Places: Auto
Default Value: 0
Description: Department Number
DisplayControl: Text Box
Ordinal Position: 14
Required: False
Source Field: Dept
Source Table: Drawings release

Date Date/Time 8

AllowZeroLength: False
Attributes: Fixed Size
Collating Order: General
ColumnHidden: True
ColumnOrder: Default
ColumnWidth: 1065
Description: Update
Format: Medium Date
Ordinal Position: 15
Required: False
Source Field: Date
Source Table: Drawings release

Table Indexes

A-110

Name	Number of Fields
ID	1
Clustered:	False
Distinct Count:	371
Foreign:	False
Ignore Nulls:	False
Name:	ID
Primary:	False
Required:	False
Unique:	False
Fields:	IDesigner, Ascending
MID	1
Clustered:	False
Distinct Count:	88
Foreign:	False
Ignore Nulls:	False
Name:	MID
Primary:	False
Required:	False
Unique:	False
Fields:	MID, Ascending
PID	1
Clustered:	False
Distinct Count:	9
Foreign:	False
Ignore Nulls:	False
Name:	PID
Primary:	False
Required:	False
Unique:	False
Fields:	PID, Ascending
PrimaryKey	1
Clustered:	False
Distinct Count:	4148
Foreign:	False
Ignore Nulls:	False
Name:	PrimaryKey
Primary:	True
Required:	True
Unique:	True
Fields:	DwgNumber, Ascending
SID	1
Clustered:	False
Distinct Count:	35
Foreign:	False
Ignore Nulls:	False
Name:	SID
Primary:	False
Required:	False
Unique:	False
Fields:	SID, Ascending
SID1	1
Clustered:	False
Distinct Count:	7

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	Foreign:	False
	Ignore Nulls:	False
	Name:	SID1
	Primary:	False
	Required:	False
	Unique:	False
	Fields:	MainID, Ascending
SID2		1
	Clustered:	False
	Distinct Count:	6
	Foreign:	False
	Ignore Nulls:	False
	Name:	SID2
	Primary:	False
	Required:	False
	Unique:	False
	Fields:	MatID, Ascending
SID3		1
	Clustered:	False
	Distinct Count:	6
	Foreign:	False
	Ignore Nulls:	False
	Name:	SID3
	Primary:	False
	Required:	False
	Unique:	False
	Fields:	WID, Ascending
SID4		1
	Clustered:	False
	Distinct Count:	11
	Foreign:	False
	Ignore Nulls:	False
	Name:	SID4
	Primary:	False
	Required:	False
	Unique:	False
	Fields:	ManufID, Ascending

User Permissions

admin

Group Permissions

Admins
Users

A-112

Properties

Date Created:	11/21/98 5:42:44 PM	Def. Updatable:	False
Last Updated:	6/29/99 11:02:28 PM	OrderBy:	[Failure parts].MRD
OrderByOn:	True	Orientation:	0
RecordCount:	379		

Columns

Name		Type	Size
PEng	AllowZeroLength: False Attributes: Fixed Size Collating Order: General ColumnHidden: False ColumnOrder: Default ColumnWidth: 645 Decimal Places: Auto Default Value: 0 Description: Project Engineer DisplayControl: Text Box Ordinal Position: 1 Required: False Source Field: PEng Source Table: Failure parts	Number (Long)	4
REng	AllowZeroLength: False Attributes: Fixed Size Collating Order: General ColumnHidden: False ColumnOrder: Default ColumnWidth: 645 Decimal Places: Auto Default Value: 0 Description: Reliability Engineer DisplayControl: Text Box Ordinal Position: 2 Required: False Source Field: REng Source Table: Failure parts	Number (Long)	4
PartNumber	AllowZeroLength: False Attributes: Variable Length Collating Order: General ColumnHidden: False ColumnOrder: Default ColumnWidth: 1695 Description: Part Number DisplayControl: Text Box Ordinal Position: 3 Required: False Source Field: PartNumber	Text	14

Source Table:		Failure parts	
MRD		Text	14
AllowZeroLength:	False		
Attributes:	Variable Length		
Collating Order:	General		
ColumnHidden:	False		
ColumnOrder:	Default		
ColumnWidth:	735		
Description:	Map Reference Designator		
DisplayControl:	Text Box		
Ordinal Position:	4		
Required:	False		
Source Field:	MRD		
Source Table:	Failure parts		
Place		Text	50
AllowZeroLength:	False		
Attributes:	Variable Length		
Collating Order:	General		
ColumnHidden:	False		
ColumnOrder:	Default		
ColumnWidth:	1440		
Description:	Place of failure: Assembly jig, Ground test ng, Flight test		
DisplayControl:	Text Box		
Ordinal Position:	5		
Required:	False		
Source Field:	Place		
Source Table:	Failure parts		
FailureDescription		Text	255
AllowZeroLength:	False		
Attributes:	Variable Length		
Collating Order:	General		
ColumnHidden:	False		
ColumnOrder:	Default		
ColumnWidth:	2775		
Description:	Failure Description		
DisplayControl:	Text Box		
Ordinal Position:	6		
Required:	False		
Source Field:	FailureDescription		
Source Table:	Failure parts		
Treatment		Text	255
AllowZeroLength:	False		
Attributes:	Variable Length		
Collating Order:	General		
ColumnHidden:	False		
ColumnOrder:	Default		
ColumnWidth:	2730		
Description:	Answer		
DisplayControl:	Text Box		
Ordinal Position:	7		
Required:	False		
Source Field:	Treatment		
Source Table:	Failure parts		

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FDate	AllowZeroLength: False Attributes: Fixed Size Collating Order: General ColumnHidden: False ColumnOrder: Default ColumnWidth: 1440 Description: Question Date Format: Medium Date Ordinal Position: 8 Required: False Source Field: FDate Source Table: Failure parts	Date/Time	8
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TDate	AllowZeroLength: False Attributes: Fixed Size Collating Order: General ColumnHidden: False ColumnOrder: Default ColumnWidth: 1440 Description: Answer Date Format: Medium Date Ordinal Position: 9 Required: False Source Field: TDate Source Table: Failure parts	Date/Time	8
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FailReportNumber	AllowZeroLength: False Attributes: Variable Length Collating Order: General ColumnHidden: False ColumnOrder: Default ColumnWidth: 1440 Description: Failure Report Number DisplayControl: Text Box Ordinal Position: 10 Required: False Source Field: FailReportNumber Source Table: Failure parts	Text	50
------------------	---	------	----

Relationships

ManagementFailure parts

Management	Failure parts
Eng	1 ∞ REng
Attributes:	Enforced
Attributes:	One-To-Many

ManagementFailure parts1

Management	Failure parts
Eng	1 ∞ PEng
Attributes:	Enforced
Attributes:	One-To-Many

MRDFailure parts

MRD	Failure parts
MRD	1 ∞ MRD
Attributes:	Enforced
Attributes:	One-To-Many

ReportsFailure parts

Reports	Failure parts
ReportNumber	1 ∞ FailReportNumber
Attributes:	Enforced
Attributes:	One-To-Many

Table Indexes

Name	Number of Fields
FailReportNumber	1
Clustered:	False
Distinct Count:	1
Foreign:	False
Ignore Nulls:	False
Name:	FailReportNumber
Primary:	False
Required:	False
Unique:	False
Fields:	FailReportNumber, Ascending
ManagementFailure parts	1
Clustered:	False
Distinct Count:	1
Foreign:	True
Ignore Nulls:	False
Name:	ManagementFailure parts
Primary:	False
Required:	False
Unique:	False
Fields:	REng, Ascending
ManagementFailure parts1	1

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	Clustered:	False
	Distinct Count:	5
	Foreign:	True
	Ignore Nulls:	False
	Name:	ManagementFailure parts1
	Primary:	False
	Required:	False
	Unique:	False
	Fields:	PEng, Ascending
MRD		1
	Clustered:	False
	Distinct Count:	379
	Foreign:	False
	Ignore Nulls:	False
	Name:	MRD
	Primary:	False
	Required:	False
	Unique:	False
	Fields:	MRD, Ascending
MRDFailure parts		1
	Clustered:	False
	Distinct Count:	379
	Foreign:	True
	Ignore Nulls:	False
	Name:	MRDFailure parts
	Primary:	False
	Required:	False
	Unique:	False
	Fields:	MRD, Ascending
PartNumber		1
	Clustered:	False
	Distinct Count:	257
	Foreign:	False
	Ignore Nulls:	False
	Name:	PartNumber
	Primary:	False
	Required:	False
	Unique:	False
	Fields:	PartNumber, Ascending
PEng		1
	Clustered:	False
	Distinct Count:	5
	Foreign:	False
	Ignore Nulls:	False
	Name:	PEng
	Primary:	False
	Required:	False
	Unique:	False
	Fields:	PEng, Ascending
REng		1
	Clustered:	False
	Distinct Count:	1
	Foreign:	False
	Ignore Nulls:	False

Name:	REng
Primary:	False
Required:	False
Unique:	False
Fields:	REng, Ascending
ReportsFailure parts	1
Clustered:	False
Distinct Count:	1
Foreign:	True
Ignore Nulls:	False
Name:	ReportsFailure parts
Primary:	False
Required:	False
Unique:	False
Fields:	FailReportNumber, Ascending

User Permissions

admin

Group Permissions

Admins
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Properties

Date Created:	4/26/98 10:10:58 PM	Def. Updatable:	False
Last Updated:	5/30/99 7:11:44 PM	OrderByOn:	True
Orientation:	0	RecordCount:	421

Columns

Name	Type	Size
FAR	Text	50
AllowZeroLength:	False	
Attributes:	Variable Length	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	Default	
ColumnWidth:	1035	
Description:	Federal Aviation Regulations	
DisplayControl:	Text Box	
Ordinal Position:	1	
Required:	False	
Source Field:	FAR	
Source Table:	FAR	
Amendment	Text	50
AllowZeroLength:	False	
Attributes:	Variable Length	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	Default	
ColumnWidth:	Default	
Description:	Federal Aviation Regulation Amendments	
DisplayControl:	Text Box	
Ordinal Position:	2	
Required:	False	
Source Field:	Amendment	
Source Table:	FAR	
FARDescription	Text	255
AllowZeroLength:	False	
Attributes:	Variable Length	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	Default	
ColumnWidth:	5460	
Description:	Federal Aviation Regulations Description	
DisplayControl:	Text Box	
Ordinal Position:	3	
Required:	False	
Source Field:	FARDescription	
Source Table:	FAR	

Relationships

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FARFAR and MRD

FAR		FAR and MRD	
	FAR	1	∞ FAR
Attributes:		Enforced	
Attributes:		One-To-Many	

Table Indexes

Name	Number of Fields
PrimaryKey	1
Clustered:	False
Distinct Count:	421
Foreign:	False
Ignore Nulls:	False
Name:	PrimaryKey
Primary:	True
Required:	True
Unique:	True
Fields:	FAR, Ascending

User Permissions

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Properties

Date Created:	1/8/99 2:43:19 PM	Def. Updatable:	False
Filter:	((([FAR and MRD].MRD) Like "ZFTF") AND ([FAR and MRD].FAR)="25.1419"))	Last Updated:	3/27/99 12:00:40 AM
OrderBy:	[FAR and MRD].MRD	OrderByOn:	True
Orientation:	0	RecordCount:	11632

Columns

Name	Type	Size
MRD	Text	14
AllowZeroLength:	False	
Attributes:	Variable Length	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	Default	
ColumnWidth:	Default	
DisplayControl:	Text Box	
Ordinal Position:	1	
Required:	False	
Source Field:	MRD	
Source Table:	FAR and MRD	
FAR	Text	50
AllowZeroLength:	False	
Attributes:	Variable Length	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	Default	
ColumnWidth:	840	
DisplayControl:	Text Box	
Ordinal Position:	2	
Required:	False	
Source Field:	FAR	
Source Table:	FAR and MRD	

Relationships

FARFAR and MRD

	FAR	FAR and MRD
	FAR	1 ∞ FAR
Attributes:		Enforced
Attributes:		One-To-Many

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MRDFAR and MRD

MRD MRD FAR and MRD
1 ∞ MRD

Attributes: Enforced
Attributes: One-To-Many

Table Indexes

Name	Number of Fields
FARFAR and MRD	1
Clustered:	False
Distinct Count:	115
Foreign:	True
Ignore Nulls:	False
Name:	FARFAR and MRD
Primary:	False
Required:	False
Unique:	False
Fields:	FAR, Ascending
MRDFAR and MRD	1
Clustered:	False
Distinct Count:	5816
Foreign:	True
Ignore Nulls:	False
Name:	MRDFAR and MRD
Primary:	False
Required:	False
Unique:	False
Fields:	MRD, Ascending
PrimaryKey	2
Clustered:	False
Distinct Count:	11632
Foreign:	False
Ignore Nulls:	False
Name:	PrimaryKey
Primary:	True
Required:	True
Unique:	True
Fields:	MRD, Ascending FAR, Ascending

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Monday, December 27, 1999
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[illegible]

A-123

Properties

Date Created:	11/30/98 8:59:16 PM	Def. Updatable:	False
Last Updated:	1/29/99 10:18:56 PM	OrderBy:	{Flight test}.FTDate
OrderByOn:	False	Orientation:	0
RecordCount:	4667		

Columns

Name	Type	Size
PEng	Number (Long)	4
AllowZeroLength: False Attributes: Variable Length Collating Order: General ColumnHidden: False ColumnOrder: Default ColumnWidth: 465 Decimal Places: Auto DisplayControl: Text Box Ordinal Position: 1 Required: False Source Field: PEng Source Table: Flight test		
FTEng	Number (Long)	4
AllowZeroLength: False Attributes: Variable Length Collating Order: General ColumnHidden: False ColumnOrder: Default ColumnWidth: 450 Decimal Places: Auto DisplayControl: Text Box Ordinal Position: 2 Required: False Source Field: FTEng Source Table: Flight test		
MRD	Text	255
AllowZeroLength: False Attributes: Variable Length Collating Order: General ColumnHidden: False ColumnOrder: Default ColumnWidth: 1170 DisplayControl: Text Box Ordinal Position: 3 Required: False Source Field: MRD Source Table: Flight test		
PartNumber	Text	255
AllowZeroLength: False Attributes: Variable Length		

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Collating Order: General
ColumnHidden: False
ColumnOrder: Default
ColumnWidth: 1695
DisplayControl: Text Box
Ordinal Position: 4
Required: False
Source Field: PartNumber
Source Table: Flight test

PartName Text 255

AllowZeroLength: False
Attributes: Variable Length
Collating Order: General
ColumnHidden: False
ColumnOrder: Default
ColumnWidth: 3810
DisplayControl: Text Box
Ordinal Position: 5
Required: False
Source Field: PartName
Source Table: Flight test

FTDescription Text 255

AllowZeroLength: False
Attributes: Variable Length
Collating Order: General
ColumnHidden: False
ColumnOrder: Default
ColumnWidth: 8745
Description: Flight test description
DisplayControl: Text Box
Ordinal Position: 6
Required: False
Source Field: FTDescription
Source Table: Flight test

FTDate Date/Time 8

AllowZeroLength: False
Attributes: Fixed Size
Collating Order: General
ColumnHidden: False
ColumnOrder: Default
ColumnWidth: 1065
Description: Flight test date
Format: Medium Date
Ordinal Position: 7
Required: False
Source Field: FTDate
Source Table: Flight test

RepNumber Text 255

AllowZeroLength: False
Attributes: Variable Length
Collating Order: General
ColumnHidden: False
ColumnOrder: Default

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ColumnWidth:	Default
DisplayControl:	Text Box
Ordinal Position:	8
Required:	False
Source Field:	RepNumber
Source Table:	Flight test

Table Indexes

Name	Number of Fields
FEng	1
Clustered:	False
Distinct Count:	1
Foreign:	False
Ignore Nulls:	False
Name:	FEng
Primary:	False
Required:	False
Unique:	False
Fields:	FTEng, Ascending
PEng	1
Clustered:	False
Distinct Count:	1
Foreign:	False
Ignore Nulls:	False
Name:	PEng
Primary:	False
Required:	False
Unique:	False
Fields:	PEng, Ascending
PrimaryKey	1
Clustered:	False
Distinct Count:	4667
Foreign:	False
Ignore Nulls:	False
Name:	PrimaryKey
Primary:	True
Required:	True
Unique:	True
Fields:	MRD, Ascending
RepNumber	1
Clustered:	False
Distinct Count:	1
Foreign:	False
Ignore Nulls:	False
Name:	RepNumber
Primary:	False
Required:	False
Unique:	False
Fields:	RepNumber, Ascending

User Permissions

admin

Group Permissions

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0042749-12709

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Properties

Date Created: 1/19/99 8:28:00 PM
Last Updated: 3/26/99 7:27:44 PM
Orientation: 0

Def. Updatable: False
OrderByOn: False
RecordCount: 83

Columns

Name	Type	Size
FMRD	Text	14
AllowZeroLength:	False	
Attributes:	Variable Length	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	Default	
ColumnWidth:	Default	
Description:	Flight Map Reference Designator	
DisplayControl:	Text Box	
Ordinal Position:	1	
Required:	False	
Source Field:	FMRD	
Source Table:	Flight test MRD	
MRD	Text	14
AllowZeroLength:	False	
Attributes:	Variable Length	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	Default	
ColumnWidth:	Default	
Description:	Map Reference Designator	
DisplayControl:	Text Box	
Ordinal Position:	2	
Required:	False	
Source Field:	MRD	
Source Table:	Flight test MRD	
Remark	Text	50
AllowZeroLength:	False	
Attributes:	Variable Length	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	Default	
ColumnWidth:	Default	
Description:	Remark	
DisplayControl:	Text Box	
Ordinal Position:	3	
Required:	False	
Source Field:	Remark	
Source Table:	Flight test MRD	

Table Indexes

Name	Number of Fields
------	------------------

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PrimaryKey	2
Clustered:	False
Distinct Count:	83
Foreign:	False
Ignore Nulls:	False
Name:	PrimaryKey
Primary:	True
Required:	True
Unique:	True
Fields:	FMRD, Ascending MRD, Ascending

User Permissions

admin

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Admins
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Properties

Date Created:	11/30/98 8:58:51 PM	Def. Updatable:	False
Last Updated:	12/10/98 11:08:51 PM	OrderByOn:	False
Orientation:	0	RecordCount:	5610

Columns

Name	Type	Size
PEng AllowZeroLength: False Attributes: Variable Length Collating Order: General ColumnHidden: False ColumnOrder: Default ColumnWidth: 465 Decimal Places: Auto DisplayControl: Text Box Ordinal Position: 1 Required: False Source Field: PEng Source Table: Ground test	Number (Long)	4
GTEng AllowZeroLength: False Attributes: Variable Length Collating Order: General ColumnHidden: False ColumnOrder: Default ColumnWidth: 450 Decimal Places: Auto DisplayControl: Text Box Ordinal Position: 2 Required: False Source Field: GTEng Source Table: Ground test	Number (Long)	4
MRD AllowZeroLength: False Attributes: Variable Length Collating Order: General ColumnHidden: False ColumnOrder: Default ColumnWidth: 735 DisplayControl: Text Box Ordinal Position: 3 Required: False Source Field: MRD Source Table: Ground test	Text	255
GTDescription AllowZeroLength: False Attributes: Variable Length Collating Order: General	Text	255

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ColumnHidden: False
ColumnOrder: Default
ColumnWidth: 9015
Description: Ground test description
DisplayControl: Text Box
Ordinal Position: 6
Required: False
Source Field: GTDescription
Source Table: Ground test

GTDate		Date/Time	8
AllowZeroLength:	False		
Attributes:	Fixed Size		
Collating Order:	General		
ColumnHidden:	False		
ColumnOrder:	Default		
ColumnWidth:	1065		
Description:	Ground test date		
Format:	Medium Date		
Ordinal Position:	7		
Required:	False		
Source Field:	GTDate		
Source Table:	Ground test		

RepNumber		Text	255
AllowZeroLength:	False		
Attributes:	Variable Length		
Collating Order:	General		
ColumnHidden:	False		
ColumnOrder:	Default		
ColumnWidth:	1440		
DisplayControl:	Text Box		
Ordinal Position:	8		
Required:	False		
Source Field:	RepNumber		
Source Table:	Ground test		

Table Indexes

Name	Number of Fields
MEng	1
Clustered:	False
Distinct Count:	1
Foreign:	False
Ignore Nulls:	False
Name:	MEng
Primary:	False
Required:	False
Unique:	False
Fields:	GTEng, Ascending
PEng	1
Clustered:	False
Distinct Count:	1
Foreign:	False
Ignore Nulls:	False

Name:	PEng
Primary:	False
Required:	False
Unique:	False
Fields:	PEng, Ascending
PrimaryKey	1
Clustered:	False
Distinct Count:	5610
Foreign:	False
Ignore Nulls:	False
Name:	PrimaryKey
Primary:	True
Required:	True
Unique:	True
Fields:	MRD, Ascending
RepNumber	1
Clustered:	False
Distinct Count:	1
Foreign:	False
Ignore Nulls:	False
Name:	RepNumber
Primary:	False
Required:	False
Unique:	False
Fields:	RepNumber, Ascending

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C:\WINDOWS\DESKTOP\DPM.mdb
Table: Grounding

Properties		Def. Updatable:	False
Date Created:	10/31/98 10:24:30 PM	OrderByOn:	False
Last Updated:	6/29/99 11:05:08 PM	RecordCount:	1083
Orientation:	0		

Columns	Name	Type	Size
	PEng	Number (Long)	4
	AllowZeroLength: Attributes: Collating Order: ColumnHidden: ColumnOrder: ColumnWidth: Decimal Places: Default Value: Description: DisplayControl: Ordinal Position: Required: Source Field: Source Table:	False Fixed Size General False Default 660 0 0 Project Engineer Number Text Box 1 False PEng Grounding	4
	SEng	Number (Long)	4
	AllowZeroLength: Attributes: Collating Order: ColumnHidden: ColumnOrder: ColumnWidth: Decimal Places: Default Value: Description: DisplayControl: Ordinal Position: Required: Source Field: Source Table:	False Fixed Size General False Default 675 0 0 Electrical Engineer Number Text Box 2 False SEng Grounding	14
	GrMRD	Text	14
	AllowZeroLength: Attributes: Collating Order: ColumnHidden: ColumnOrder: ColumnWidth: Description: DisplayControl: Ordinal Position: Required: Source Field: Source Table:	False Variable Length General False Default 990 Grounding Map Reference Designator Text Box 3 False GrMRD Grounding	

SysMRD		Text	14
AllowZeroLength:	False		
Attributes:	Variable Length		
Collating Order:	General		
ColumnHidden:	False		
ColumnOrder:	Default		
ColumnWidth:	915		
Description:	Map Reference Designator of System part		
DisplayControl:	Text Box		
Ordinal Position:	4		
Required:	False		
Source Field:	SysMRD		
Source Table:	Grounding		
StrMRD		Text	14
AllowZeroLength:	False		
Attributes:	Variable Length		
Collating Order:	General		
ColumnHidden:	False		
ColumnOrder:	Default		
ColumnWidth:	1080		
Description:	Map Reference Designator of Structure part		
DisplayControl:	Text Box		
Ordinal Position:	5		
Required:	False		
Source Field:	StrMRD		
Source Table:	Grounding		
GrType		Text	50
AllowZeroLength:	False		
Attributes:	Variable Length		
Collating Order:	General		
ColumnHidden:	False		
ColumnOrder:	Default		
ColumnWidth:	945		
Description:	Grounding type		
DisplayControl:	Text Box		
Ordinal Position:	6		
Required:	False		
Source Field:	GrType		
Source Table:	Grounding		
Length		Number (Double)	8
AllowZeroLength:	False		
Attributes:	Fixed Size		
Collating Order:	General		
ColumnHidden:	False		
ColumnOrder:	Default		
ColumnWidth:	840		
Decimal Places:	2		
Default Value:	0		
Description:	Grounding wire length in inch		
DisplayControl:	Text Box		
Format:	General Number		
Ordinal Position:	7		
Required:	False		
Source Field:	Length		

Source Table:		Grounding	
Res		Number (Double)	8
AllowZeroLength:	False		
Attributes:	Fixed Size		
Collating Order:	General		
ColumnHidden:	False		
ColumnOrder:	Default		
ColumnWidth:	690		
Decimal Places:	2		
Default Value:	0		
Description:	Resistance in ohm		
DisplayControl:	Text Box		
Format:	General Number		
Ordinal Position:	8		
Required:	False		
Source Field:	Res		
Source Table:	Grounding		
GroundingCriteria		Text	255
AllowZeroLength:	False		
Attributes:	Variable Length		
Collating Order:	General		
ColumnHidden:	False		
ColumnOrder:	Default		
ColumnWidth:	10260		
Description:	Grounding basic consideration		
DisplayControl:	Text Box		
Ordinal Position:	9		
Required:	False		
Source Field:	GroundingCriteria		
Source Table:	Grounding		
GrRepNumber		Text	50
AllowZeroLength:	False		
Attributes:	Variable Length		
Collating Order:	General		
ColumnHidden:	False		
ColumnOrder:	Default		
ColumnWidth:	Default		
Description:	Grounding Report Number		
DisplayControl:	Text Box		
Ordinal Position:	10		
Required:	False		
Source Field:	GrRepNumber		
Source Table:	Grounding		

Relationships

MRDGrounding

MRD		Grounding	
	MRD	1	∞ SysMRD
Attributes:		Enforced	
Attributes:		One-To-Many	

MRDGrounding1

MRD		Grounding	
	MRD	1	∞ StrMRD
Attributes:		Enforced	
Attributes:		One-To-Many	

ReportsGrounding

Reports		Grounding	
	ReportNumber	1	∞ GrRepNumber
Attributes:		Enforced	
Attributes:		One-To-Many	

Table Indexes

Name	Number of Fields
GrRepNumber	1
Clustered:	False
Distinct Count:	2
Foreign:	False
Ignore Nulls:	False
Name:	GrRepNumber
Primary:	False
Required:	False
Unique:	False
Fields:	GrRepNumber, Ascending
MRDGrounding	1
Clustered:	False
Distinct Count:	1083
Foreign:	True
Ignore Nulls:	False
Name:	MRDGrounding
Primary:	False
Required:	False
Unique:	False
Fields:	SysMRD, Ascending
MRDGrounding1	1

	Clustered:	False
	Distinct Count:	231
	Foreign:	True
	Ignore Nulls:	False
	Name:	MRDGrounding1
	Primary:	False
	Required:	False
	Unique:	False
	Fields:	StrMRD, Ascending
PEng		1
	Clustered:	False
	Distinct Count:	2
	Foreign:	False
	Ignore Nulls:	False
	Name:	PEng
	Primary:	False
	Required:	False
	Unique:	False
	Fields:	PEng, Ascending
PrimaryKey		1
	Clustered:	False
	Distinct Count:	1083
	Foreign:	False
	Ignore Nulls:	False
	Name:	PrimaryKey
	Primary:	True
	Required:	True
	Unique:	True
	Fields:	GrMRD, Ascending
ReportsGrounding		1
	Clustered:	False
	Distinct Count:	2
	Foreign:	True
	Ignore Nulls:	False
	Name:	ReportsGrounding
	Primary:	False
	Required:	False
	Unique:	False
	Fields:	GrRepNumber, Ascending
SEng		1
	Clustered:	False
	Distinct Count:	2
	Foreign:	False
	Ignore Nulls:	False
	Name:	SEng
	Primary:	False
	Required:	False
	Unique:	False
	Fields:	SEng, Ascending
StrMRD		1
	Clustered:	False
	Distinct Count:	231
	Foreign:	False
	Ignore Nulls:	False

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Name:	StrMRD
Primary:	False
Required:	False
Unique:	False
Fields:	StrMRD, Ascending
SysMRD	1
Clustered:	False
Distinct Count:	1083
Foreign:	False
Ignore Nulls:	False
Name:	SysMRD
Primary:	False
Required:	False
Unique:	False
Fields:	SysMRD, Ascending

User Permissions

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Properties

Date Created:	5/29/99 8:48:45 PM	Def. Updatable:	False
Last Updated:	6/5/99 10:14:29 AM	OrderByOn:	False
Orientation:	0	RecordCount:	359

Columns

Name	Type	Size
PEng AllowZeroLength: False Attributes: Fixed Size Collating Order: General ColumnHidden: False ColumnOrder: Default ColumnWidth: 645 Decimal Places: Auto Default Value: 0 Description: Project Engineer DisplayControl: Text Box Ordinal Position: 1 Required: False Source Field: PEng Source Table: LLI	Number (Long)	4
SEng AllowZeroLength: False Attributes: Fixed Size Collating Order: General ColumnHidden: False ColumnOrder: Default ColumnWidth: 645 Decimal Places: Auto Default Value: 0 Description: System Engineer DisplayControl: Text Box Ordinal Position: 2 Required: False Source Field: SEng Source Table: LLI	Number (Long)	4
PartNumber AllowZeroLength: False Attributes: Variable Length Collating Order: General ColumnHidden: False ColumnOrder: Default ColumnWidth: 1695 Description: Part Number DisplayControl: Text Box Ordinal Position: 3 Required: False Source Field: PartNumber Source Table: LLI	Text	50

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ReportNumber		Text	50
AllowZeroLength:	False		
Attributes:	Variable Length		
Collating Order:	General		
ColumnHidden:	False		
ColumnOrder:	Default		
ColumnWidth:	1530		
Description:	Long Lead Item Report Number		
DisplayControl:	Text Box		
Ordinal Position:	4		
Required:	False		
Source Field:	ReportNumber		
Source Table:	LLI		
ID		Number (Long)	4
AllowZeroLength:	False		
Attributes:	Fixed Size		
Collating Order:	General		
ColumnHidden:	False		
ColumnOrder:	Default		
ColumnWidth:	990		
Decimal Places:	Auto		
Default Value:	0		
Description:	Identification Number		
DisplayControl:	Text Box		
Ordinal Position:	5		
Required:	False		
Source Field:	ID		
Source Table:	LLI		

Relationships

PartsLLI

Parts	LLI
PartNumber	PartNumber
Attributes:	Unique, Enforced
Attributes:	One-To-One

PersonnelLLI

Personnel	LLI
ID	ID
Attributes:	Enforced
Attributes:	One-To-Many

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ReportsLLI

Reports	LLI
ReportNumber	1 ∞ ReportNumber
Attributes:	Enforced
Attributes:	One-To-Many

Table Indexes

Name	Number of Fields
ID	1
Clustered:	False
Distinct Count:	1
Foreign:	False
Ignore Nulls:	False
Name:	ID
Primary:	False
Required:	False
Unique:	False
Fields:	ID, Ascending
PartsLLI	1
Clustered:	False
Distinct Count:	359
Foreign:	True
Ignore Nulls:	False
Name:	PartsLLI
Primary:	False
Required:	False
Unique:	True
Fields:	PartNumber, Ascending
PEng	1
Clustered:	False
Distinct Count:	1
Foreign:	False
Ignore Nulls:	False
Name:	PEng
Primary:	False
Required:	False
Unique:	False
Fields:	PEng, Ascending
PersonnelLLI	1
Clustered:	False
Distinct Count:	1
Foreign:	True
Ignore Nulls:	False
Name:	PersonnelLLI
Primary:	False
Required:	False
Unique:	False
Fields:	ID, Ascending

PrimaryKey	1
Clustered:	False
Distinct Count:	359
Foreign:	False
Ignore Nulls:	False
Name:	PrimaryKey
Primary:	True
Required:	True
Unique:	True
Fields:	PartNumber, Ascending
ReportNumber	1
Clustered:	False
Distinct Count:	1
Foreign:	False
Ignore Nulls:	False
Name:	ReportNumber
Primary:	False
Required:	False
Unique:	False
Fields:	ReportNumber, Ascending
ReportsLLI	1
Clustered:	False
Distinct Count:	1
Foreign:	True
Ignore Nulls:	False
Name:	ReportsLLI
Primary:	False
Required:	False
Unique:	False
Fields:	ReportNumber, Ascending
SEng	1
Clustered:	False
Distinct Count:	1
Foreign:	False
Ignore Nulls:	False
Name:	SEng
Primary:	False
Required:	False
Unique:	False
Fields:	SEng, Ascending

User Permissions

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Group Permissions

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Properties

Date Created:	5/29/99 8:56:35 PM	Def. Updatable:	False
Last Updated:	5/29/99 9:58:56 PM	OrderByOn:	False
Orientation:	0	RecordCount:	361

Columns

Name	Type	Size
PEng	Number (Long)	4
AllowZeroLength:	False	
Attributes:	Fixed Size	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	Default	
ColumnWidth:	645	
Decimal Places:	Auto	
Default Value:	0	
Description:	Project Engineer	
DisplayControl:	Text Box	
Ordinal Position:	1	
Required:	False	
Source Field:	PEng	
Source Table:	LRU	
MEng	Number (Long)	4
AllowZeroLength:	False	
Attributes:	Fixed Size	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	Default	
ColumnWidth:	675	
Decimal Places:	Auto	
Default Value:	0	
Description:	Maintenance Engineer	
DisplayControl:	Text Box	
Ordinal Position:	2	
Required:	False	
Source Field:	MEng	
Source Table:	LRU	
MRD	Text	50
AllowZeroLength:	False	
Attributes:	Variable Length	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	Default	
ColumnWidth:	735	
Description:	Map Reference Designator	
DisplayControl:	Text Box	
Ordinal Position:	3	
Required:	False	
Source Field:	MRD	
Source Table:	LRU	

ReportNumber	Text	50
AllowZeroLength:	False	
Attributes:	Variable Length	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	Default	
ColumnWidth:	1530	
Description:	LRU Report Number	
DisplayControl:	Text Box	
Ordinal Position:	4	
Required:	False	
Source Field:	ReportNumber	
Source Table:	LRU	

ID	Number (Long)	4
AllowZeroLength:	False	
Attributes:	Fixed Size	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	Default	
ColumnWidth:	990	
Decimal Places:	Auto	
Default Value:	0	
Description:	Identification Number	
DisplayControl:	Text Box	
Ordinal Position:	5	
Required:	False	
Source Field:	ID	
Source Table:	LRU	

Relationships

MRDLRU

	MRD		LRU
		1 1	
MRD			MRD
Attributes:			Unique, Enforced
Attributes:			One-To-One

PersonnelLRU

	Personnel		LRU
		1 ∞	
ID			ID
Attributes:			Enforced
Attributes:			One-To-Many

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ReportsLRU

Reports		LRU	
ReportNumber	1	∞	ReportNumber
Attributes:	Enforced		
Attributes:	One-To-Many		

Table Indexes

Name	Number of Fields
ID	1
Clustered:	False
Distinct Count:	1
Foreign:	False
Ignore Nulls:	False
Name:	ID
Primary:	False
Required:	False
Unique:	False
Fields:	ID, Ascending
MEng	1
Clustered:	False
Distinct Count:	1
Foreign:	False
Ignore Nulls:	False
Name:	MEng
Primary:	False
Required:	False
Unique:	False
Fields:	MEng, Ascending
MRDLRU	1
Clustered:	False
Distinct Count:	361
Foreign:	True
Ignore Nulls:	False
Name:	MRDLRU
Primary:	False
Required:	False
Unique:	True
Fields:	MRD, Ascending
PEng	1
Clustered:	False
Distinct Count:	1
Foreign:	False
Ignore Nulls:	False
Name:	PEng
Primary:	False
Required:	False
Unique:	False
Fields:	PEng, Ascending

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PersonnelLRU 1
Clustered: False
Distinct Count: 1
Foreign: True
Ignore Nulls: False
Name: PersonnelLRU
Primary: False
Required: False
Unique: False
Fields: ID, Ascending
PrimaryKey 1
Clustered: False
Distinct Count: 361
Foreign: False
Ignore Nulls: False
Name: PrimaryKey
Primary: True
Required: True
Unique: True
Fields: MRD, Ascending
ReportNumber 1
Clustered: False
Distinct Count: 1
Foreign: False
Ignore Nulls: False
Name: ReportNumber
Primary: False
Required: False
Unique: False
Fields: ReportNumber, Ascending
ReportsLRU 1
Clustered: False
Distinct Count: 1
Foreign: True
Ignore Nulls: False
Name: ReportsLRU
Primary: False
Required: False
Unique: False
Fields: ReportNumber, Ascending

User Permissions

admin

Group Permissions

Admins
Users

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Properties

Date Created: 11/28/98 12:11:07 AM
Last Updated: 6/29/99 10:03:08 PM
Orientation: 0

Def. Updatable: False
OrderByOn: False
RecordCount: 669

Columns

Name	Type	Size
PEng	Number (Long)	4
AllowZeroLength:	False	
Attributes:	Variable Length	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	Default	
ColumnWidth:	465	
Decimal Places:	Auto	
DisplayControl:	Text Box	
Ordinal Position:	1	
Required:	False	
Source Field:	PEng	
Source Table:	Maintenance	
MEng	Number (Long)	4
AllowZeroLength:	False	
Attributes:	Variable Length	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	Default	
ColumnWidth:	450	
Decimal Places:	Auto	
DisplayControl:	Text Box	
Ordinal Position:	2	
Required:	False	
Source Field:	MEng	
Source Table:	Maintenance	
PartNumber	Text	255
AllowZeroLength:	False	
Attributes:	Variable Length	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	Default	
ColumnWidth:	1695	
DisplayControl:	Text Box	
Ordinal Position:	3	
Required:	False	
Source Field:	PartNumber	
Source Table:	Maintenance	
MTBF	Number (Long)	4
AllowZeroLength:	False	
Attributes:	Fixed Size	
Collating Order:	General	

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ColumnHidden: False
ColumnOrder: Default
ColumnWidth: 990
Decimal Places: Auto
Default Value: 0
Description: Mean Time Between Failure in hours
DisplayControl: Text Box
Ordinal Position: 4
Required: False
Source Field: MTBF
Source Table: Maintenance

Level Text 50

AllowZeroLength: False
Attributes: Variable Length
Collating Order: General
ColumnHidden: False
ColumnOrder: Default
ColumnWidth: 1440
Description: Pre-flight, dayly, monthly, shop
DisplayControl: Text Box
Ordinal Position: 5
Required: False
Source Field: Level
Source Table: Maintenance

RepNumber Text 50

AllowZeroLength: False
Attributes: Variable Length
Collating Order: General
ColumnHidden: False
ColumnOrder: Default
ColumnWidth: Default
DisplayControl: Text Box
Ordinal Position: 6
Required: False
Source Field: RepNumber
Source Table: Maintenance

Remarks Text 255

AllowZeroLength: False
Attributes: Variable Length
Collating Order: General
ColumnHidden: False
ColumnOrder: Default
ColumnWidth: Default
DisplayControl: Text Box
Ordinal Position: 7
Required: False
Source Field: Remarks
Source Table: Maintenance

Relationships

ManagementMaintenance

Management		Maintenance
Eng	1 ∞	PEng

Attributes:	Enforced
Attributes:	One-To-Many

ManagementMaintenance1

Management		Maintenance
Eng	1 ∞	MEng

Attributes:	Enforced
Attributes:	One-To-Many

PartsMaintenance

Parts		Maintenance
PartNumber	1 1	PartNumber

Attributes:	Unique, Enforced
Attributes:	One-To-One

ReportsMaintenance

Reports		Maintenance
ReportNumber	1 ∞	RepNumber

Attributes:	Enforced
Attributes:	One-To-Many

Table Indexes

Name	Number of Fields
ManagementMaintenance	1
Clustered:	False
Distinct Count:	6
Foreign:	True
Ignore Nulls:	False
Name:	ManagementMaintenance
Primary:	False
Required:	False
Unique:	False
Fields:	PEng, Ascending
ManagementMaintenance1	1

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	Clustered:	False
	Distinct Count:	1
	Foreign:	True
	Ignore Nulls:	False
	Name:	ManagementMaintenance1
	Primary:	False
	Required:	False
	Unique:	False
	Fields:	MEng, Ascending
MEng		1
	Clustered:	False
	Distinct Count:	1
	Foreign:	False
	Ignore Nulls:	False
	Name:	MEng
	Primary:	False
	Required:	False
	Unique:	False
	Fields:	MEng, Ascending
PartsMaintenance		1
	Clustered:	False
	Distinct Count:	669
	Foreign:	True
	Ignore Nulls:	False
	Name:	PartsMaintenance
	Primary:	False
	Required:	False
	Unique:	True
	Fields:	PartNumber, Ascending
PEng		1
	Clustered:	False
	Distinct Count:	6
	Foreign:	False
	Ignore Nulls:	False
	Name:	PEng
	Primary:	False
	Required:	False
	Unique:	False
	Fields:	PEng, Ascending
PrimaryKey		1
	Clustered:	False
	Distinct Count:	669
	Foreign:	False
	Ignore Nulls:	False
	Name:	PrimaryKey
	Primary:	True
	Required:	True
	Unique:	True
	Fields:	PartNumber, Ascending
RepNumber		1
	Clustered:	False
	Distinct Count:	1
	Foreign:	False
	Ignore Nulls:	False

C:\WINDOWS\DESKTOP\DPM.mdb
Table: Maintenance

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Page: 151

Name:	RepNumber
Primary:	False
Required:	False
Unique:	False
Fields:	RepNumber, Ascending
ReportsMaintenance	1
Clustered:	False
Distinct Count:	1
Foreign:	True
Ignore Nulls:	False
Name:	ReportsMaintenance
Primary:	False
Required:	False
Unique:	False
Fields:	RepNumber, Ascending

User Permissions

admin

Group Permissions

Admins
Users

Properties

Date Created:	11/27/98 11:24:54 PM	Def. Updatable:	False
Last Updated:	2/26/99 9:13:29 AM	OrderByOn:	False
Orientation:	0	RecordCount:	1894

Columns

Name	Type	Size
PartNumber	Text	50
AllowZeroLength:	False	
Attributes:	Variable Length	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	Default	
ColumnWidth:	1695	
Description:	Part Number	
DisplayControl:	Text Box	
Ordinal Position:	4	
Required:	False	
Source Field:	PartNumber	
Source Table:	Maintenance service	
N	Number (Integer)	2
AllowZeroLength:	False	
Attributes:	Fixed Size	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	Default	
ColumnWidth:	285	
Decimal Places:	Auto	
Default Value:	0	
Description:	Sequence number	
DisplayControl:	Text Box	
Format:	General Number	
Ordinal Position:	6	
Required:	False	
Source Field:	N	
Source Table:	Maintenance service	
MaintenanceService	Text	255
AllowZeroLength:	False	
Attributes:	Variable Length	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	Default	
ColumnWidth:	5985	
Description:	Maintenance service description	
DisplayControl:	Text Box	
Ordinal Position:	7	
Required:	False	
Source Field:	MaintenanceService	
Source Table:	Maintenance service	

Relationships

PartsMaintenance service

Parts	Maintenance service
PartNumber	1 ∞ PartNumber
Attributes:	Enforced
Attributes:	One-To-Many

Table Indexes

Name	Number of Fields
PartsMaintenance service	1
Clustered:	False
Distinct Count:	669
Foreign:	True
Ignore Nulls:	False
Name:	PartsMaintenance service
Primary:	False
Required:	False
Unique:	False
Fields:	PartNumber, Ascending
PrimaryKey	2
Clustered:	False
Distinct Count:	1894
Foreign:	False
Ignore Nulls:	False
Name:	PrimaryKey
Primary:	True
Required:	True
Unique:	True
Fields:	PartNumber, Ascending N, Ascending

User Permissions

admin

Group Permissions

Admins
Users

Properties

Date Created:	4/27/98 9:00:35 PM	Def. Updatable:	False
Last Updated:	6/29/99 10:40:19 PM	OrderByOn:	False
Orientation:	0	RecordCount:	265

Columns

Name	Type	Size
Eng	Number (Long)	4
AllowZeroLength: False		
Attributes: Fixed Size		
Collating Order: General		
ColumnHidden: False		
ColumnOrder: Default		
ColumnWidth: 510		
Decimal Places: Auto		
Default Value: 0		
Description: Engineer Number		
DisplayControl: Text Box		
Ordinal Position: 1		
Required: False		
Source Field: Eng		
Source Table: Management		
Discipline	Text	50
AllowZeroLength: False		
Attributes: Variable Length		
Collating Order: General		
ColumnHidden: False		
ColumnOrder: Default		
ColumnWidth: 3285		
Description: Discipline		
DisplayControl: Text Box		
Ordinal Position: 2		
Required: False		
Source Field: Discipline		
Source Table: Management		
Position	Text	50
AllowZeroLength: False		
Attributes: Variable Length		
Collating Order: General		
ColumnHidden: False		
ColumnOrder: Default		
ColumnWidth: 3015		
Description: Position		
DisplayControl: Text Box		
Ordinal Position: 3		
Required: False		
Source Field: Position		
Source Table: Management		
ID	Number (Long)	4

AllowZeroLength:	False
Attributes:	Fixed Size
Collating Order:	General
ColumnHidden:	False
ColumnOrder:	Default
ColumnWidth:	990
Decimal Places:	Auto
Default Value:	0
Description:	Identification Number
DisplayControl:	Text Box
Ordinal Position:	4
Required:	False
Source Field:	ID
Source Table:	Management

Relationships

ManagementAMO data

Management		AMO data
Eng	1 ∞ MEng	
Attributes:	Enforced	
Attributes:	One-To-Many	

ManagementAMO data1

Management		AMO data
Eng	1 ∞ PEng	
Attributes:	One-To-Many	
Attributes:	Enforced	

ManagementAssembly

Management		Assembly
Eng	1 ∞ PEng	
Attributes:	One-To-Many	
Attributes:	Enforced	

ManagementAssembly1

	Management			Assembly
	Eng	1	∞	SEng
Attributes:				One-To-Many
Attributes:				Enforced

ManagementComponents

	Management			Components
	Eng	1	∞	MEng
Attributes:				One-To-Many
Attributes:				Enforced

ManagementComponents1

	Management			Components
	Eng	1	∞	DEng
Attributes:				One-To-Many
Attributes:				Enforced

ManagementComponents2

	Management			Components
	Eng	1	∞	PEng
Attributes:				One-To-Many
Attributes:				Enforced

ManagementComponents3

	Management			Components
	Eng	1	∞	PrEng
Attributes:				One-To-Many
Attributes:				Enforced

ManagementCritical parts

Management	Critical parts
Eng	1 ∞ FEng
Attributes:	Enforced
Attributes:	One-To-Many

ManagementCritical parts1

Management	Critical parts
Eng	1 ∞ PEng
Attributes:	One-To-Many
Attributes:	Enforced

ManagementFailure parts

Management	Failure parts
Eng	1 ∞ REng
Attributes:	One-To-Many
Attributes:	Enforced

ManagementFailure parts1

Management	Failure parts
Eng	1 ∞ PEng
Attributes:	One-To-Many
Attributes:	Enforced

ManagementMaintenance

Management	Maintenance
Eng	1 ∞ PEng
Attributes:	One-To-Many
Attributes:	Enforced

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ManagementMaintenance1

	Management			Maintenance
	Eng	1	∞	MEng
Attributes:				One-To-Many
Attributes:				Enforced

ManagementOrders

	Management			Orders
	Eng	1	∞	MEng
Attributes:				One-To-Many
Attributes:				Enforced

ManagementOrders1

	Management			Orders
	Eng	1	∞	PrEng
Attributes:				Enforced
Attributes:				One-To-Many

ManagementProcurement

	Management			Procurement
	Eng	1	∞	ProEng
Attributes:				One-To-Many
Attributes:				Enforced

ManagementProduction WBS

	Management			Production WBS
	Eng	1	∞	MEng
Attributes:				One-To-Many
Attributes:				Enforced

ManagementProduction WBS1

Management	Production WBS
Eng	1 ∞ PEng
Attributes:	One-To-Many
Attributes:	Enforced

ManagementProduction WBS2

Management	Production WBS
Eng	1 ∞ MEng
Attributes:	One-To-Many
Attributes:	Enforced

ManagementProduction WBS3

Management	Production WBS
Eng	1 ∞ PEng
Attributes:	One-To-Many
Attributes:	Enforced

ManagementReliability

Management	Reliability
Eng	1 ∞ REng
Attributes:	One-To-Many
Attributes:	Enforced

ManagementReliability1

Management	Reliability
Eng	1 ∞ PEng
Attributes:	One-To-Many
Attributes:	Enforced

ManagementVibration

Management	Vibration
Eng	1 ∞ PEng
Attributes:	Enforced
Attributes:	One-To-Many

ManagementWBS

Management	WBS
Eng	1 ∞ Eng
Attributes:	One-To-Many
Attributes:	Enforced

ManagementWeight

Management	Weight
Eng	1 ∞ PEng
Attributes:	One-To-Many
Attributes:	Enforced

ManagementWeight1

Management	Weight
Eng	1 ∞ WEng
Attributes:	One-To-Many
Attributes:	Enforced

PersonnelManagement

Personnel	Management
ID	1 ∞ ID
Attributes:	One-To-Many
Attributes:	Enforced

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PersonnelManagement1

Personnel	Management
ID	1 ∞ ID
Attributes:	One-To-Many
Attributes:	Enforced

PersonnelManagement2

Personnel	Management
ID	1 ∞ ID
Attributes:	Enforced
Attributes:	One-To-Many

Table Indexes

Name	Number of Fields
ID	1
Clustered:	False
Distinct Count:	177
Foreign:	False
Ignore Nulls:	False
Name:	ID
Primary:	False
Required:	False
Unique:	False
Fields:	ID, Ascending
PersonnelManagement	1
Clustered:	False
Distinct Count:	177
Foreign:	True
Ignore Nulls:	False
Name:	PersonnelManagement
Primary:	False
Required:	False
Unique:	False
Fields:	ID, Ascending
PersonnelManagement1	1
Clustered:	False
Distinct Count:	177
Foreign:	True
Ignore Nulls:	False
Name:	PersonnelManagement1
Primary:	False
Required:	False
Unique:	False
Fields:	ID, Ascending

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PersonnelManagement2	1
Clustered:	False
Distinct Count:	177
Foreign:	True
Ignore Nulls:	False
Name:	PersonnelManagement2
Primary:	False
Required:	False
Unique:	False
Fields:	ID, Ascending
PrimaryKey	1
Clustered:	False
Distinct Count:	265
Foreign:	False
Ignore Nulls:	False
Name:	PrimaryKey
Primary:	True
Required:	True
Unique:	True
Fields:	Eng, Ascending

User Permissions

admin

Group Permissions

Admins
Users

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Properties

Date Created: 4/27/98 8:33:34 PM
Last Updated: 11/9/98 9:45:57 PM
OrderByOn: False
RecordCount: 128

Def. Updatable: False
OrderBy: Manufacturer.Country
Orientation: 0

Columns

Name	Type	Size
Company	Text	50
AllowZeroLength:	False	
Attributes:	Variable Length	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	1	
ColumnWidth:	1845	
Description:	Company	
DisplayControl:	Text Box	
Ordinal Position:	1	
Required:	False	
Source Field:	Company	
Source Table:	Manufacturer	
Country	Text	50
AllowZeroLength:	False	
Attributes:	Variable Length	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	Default	
ColumnWidth:	945	
Description:	Company	
DisplayControl:	Text Box	
Ordinal Position:	2	
Required:	False	
Source Field:	Country	
Source Table:	Manufacturer	
Address	Text	50
AllowZeroLength:	False	
Attributes:	Variable Length	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	Default	
ColumnWidth:	2580	
Description:	Address	
DisplayControl:	Text Box	
Ordinal Position:	3	
Required:	False	
Source Field:	Address	
Source Table:	Manufacturer	
Phone	Text	50
AllowZeroLength:	False	

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Attributes:
Collating Order:
ColumnHidden:
ColumnOrder:
ColumnWidth:
Description:
DisplayControl:
Ordinal Position:
Required:
Source Field:
Source Table:

Variable Length
General
False
Default
990
Phone
Text Box
4
False
Phone
Manufacturer

Fax Text 50

AllowZeroLength:
Attributes:
Collating Order:
ColumnHidden:
ColumnOrder:
ColumnWidth:
Description:
DisplayControl:
Ordinal Position:
Required:
Source Field:
Source Table:

False
Variable Length
General
False
Default
990
Fax
Text Box
5
False
Fax
Manufacturer

Hrate Number (Double) 8

AllowZeroLength:
Attributes:
Collating Order:
ColumnHidden:
ColumnOrder:
ColumnWidth:
Decimal Places:
Default Value:
Description:
DisplayControl:
Format:
Ordinal Position:
Required:
Source Field:
Source Table:

False
Fixed Size
General
False
Default
840
2
0
Labor rate per hour in \$
Text Box
\$#,##0.00;(\$#,##0.00)
6
False
Hrate
Manufacturer

Relationships

ManufacturerOrders

Manufacturer	Orders
Company	1 ∞ Manufacturer
Attributes:	Enforced
Attributes:	One-To-Many

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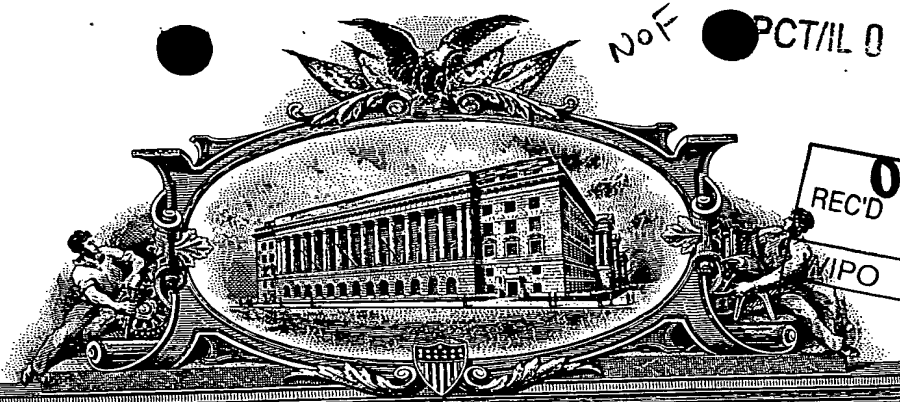
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United States Patent and Trademark Office

IL00/857

December 13, 2000

THIS IS TO CERTIFY THAT ANNEXED HERETO IS A TRUE COPY FROM THE RECORDS OF THE UNITED STATES PATENT AND TRADEMARK OFFICE OF THOSE PAPERS OF THE BELOW IDENTIFIED PATENT APPLICATION THAT MET THE REQUIREMENTS TO BE GRANTED A FILING DATE UNDER 35 USC 111.

APPLICATION NUMBER: 60/173,718

FILING DATE: December 30, 1999

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By Authority of the
COMMISSIONER OF PATENTS AND TRADEMARKS

PART (3) OF (3) PART(S)

E. Bornett
E. BORNETT
Certifying Officer

Manufacturer		Components	
Company	1	∞	Manufacturer

Attributes: Enforced
Attributes: One-To-Many

Name	Number of Fields
PrimaryKey	1
Clustered:	False
Distinct Count:	128
Foreign:	False
Ignore Nulls:	False
Name:	PrimaryKey
Primary:	True
Required:	True
Unique:	True
Fields:	Company, Ascending

admin

Admins
Users

Properties

Date Created: 4/26/98 8:38:04 PM
Last Updated: 6/29/99 10:47:46 PM
Orientation: 0

Def. Updatable: False
OrderByOn: False
RecordCount: 6607

Columns

Name	Type	Size
MRD	Text	14
AllowZeroLength: False		
Attributes: Variable Length		
Collating Order: General		
ColumnHidden: False		
ColumnOrder: Default		
ColumnWidth: 1170		
Description: Map Reference Designator		
DisplayControl: Text Box		
Ordinal Position: 1		
Required: False		
Source Field: MRD		
Source Table: MRD		
Type	Text	50
AllowZeroLength: False		
Attributes: Variable Length		
Collating Order: General		
ColumnHidden: False		
ColumnOrder: Default		
ColumnWidth: 615		
Description: Type		
DisplayControl: Text Box		
Ordinal Position: 2		
Required: False		
Source Field: Type		
Source Table: MRD		
System	Text	50
AllowZeroLength: False		
Attributes: Variable Length		
Collating Order: General		
ColumnHidden: False		
ColumnOrder: Default		
ColumnWidth: Default		
Description: System		
DisplayControl: Text Box		
Ordinal Position: 3		
Required: False		
Source Field: System		
Source Table: MRD		
Subsystem	Text	50
AllowZeroLength: False		
Attributes: Variable Length		

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Collating Order: General
ColumnHidden: False
ColumnOrder: Default
ColumnWidth: Default
Description: Subsystem
DisplayControl: Text Box
Ordinal Position: 4
Required: False
Source Field: Subsystem
Source Table: MRD

Subsystems Text 50

AllowZeroLength: False
Attributes: Variable Length
Collating Order: General
ColumnHidden: False
ColumnOrder: Default
ColumnWidth: Default
Description: Subsystems
DisplayControl: Text Box
Ordinal Position: 5
Required: False
Source Field: Subsystems
Source Table: MRD

MapDwgNumber Text 50

AllowZeroLength: False
Attributes: Variable Length
Collating Order: General
ColumnHidden: False
ColumnOrder: Default
ColumnWidth: Default
Description: MapDrawing Number
DisplayControl: Text Box
Ordinal Position: 6
Required: True
Source Field: MapDwgNumber
Source Table: MRD

MapSysReport Text 50

AllowZeroLength: False
Attributes: Variable Length
Collating Order: General
ColumnHidden: False
ColumnOrder: Default
ColumnWidth: Default
Description: Map System Report Number
DisplayControl: Text Box
Ordinal Position: 7
Required: True
Source Field: MapSysReport
Source Table: MRD

SCode Text 50

AllowZeroLength: False
Attributes: Variable Length
Collating Order: General

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ColumnHidden:	False
ColumnOrder:	Default
ColumnWidth:	780
Description:	Surviveability Code
DisplayControl:	Text Box
Ordinal Position:	8
Required:	False
Source Field:	SCode
Source Table:	MRD

Relationships

DrawingsMRD

Drawings	MRD
DwgNumber	1 ∞ MapDwgNumber
Attributes:	Enforced
Attributes:	One-To-Many

MRDAction answer

MRD	Action answer
MRD	1 ∞ MRD
Attributes:	One-To-Many
Attributes:	Enforced

MRDAMO and MRD

MRD	AMO and MRD
MRD	1 ∞ MRD
Attributes:	One-To-Many
Attributes:	Enforced

MRDAssembly

MRD	Assembly
MRD	1 ∞ MRD
Attributes:	One-To-Many
Attributes:	Enforced

MRDAssembly1

	MRD		Assembly
	MRD	1	∞ MRDA
Attributes:			One-To-Many
Attributes:			Enforced

MRDBay and Door

	MRD		Bay and Door
	MRD	1	∞ MRD
Attributes:			Enforced
Attributes:			One-To-Many

MRDCritical parts

	MRD		Critical parts
	MRD	1	1 MRD
Attributes:			One-To-One
Attributes:			Unique, Enforced

MRDDesign criteria

	MRD		Design criteria
	MRD	1	∞ MRD
Attributes:			One-To-Many
Attributes:			Enforced

MRDDoor

	MRD		Door
	MRD	1	1 MRD
Attributes:			One-To-One
Attributes:			Unique, Enforced

MRDFailure parts

	MRD		Failure parts
	MRD	1 ∞	MRD
Attributes:			Enforced
Attributes:			One-To-Many

MRDFAR and MRD

	MRD		FAR and MRD
	MRD	1 ∞	MRD
Attributes:			One-To-Many
Attributes:			Enforced

MRDGrounding

	MRD		Grounding
	MRD	1 ∞	SysMRD
Attributes:			One-To-Many
Attributes:			Enforced

MRDGrounding1

	MRD		Grounding
	MRD	1 ∞	StrMRD
Attributes:			One-To-Many
Attributes:			Enforced

MRDLRU

	MRD		LRU
	MRD	1 1	MRD
Attributes:			One-To-One
Attributes:			Unique, Enforced

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MRDPenetration

	MRD		Penetration
MRD		1	∞ SysMRD
Attributes:		Enforced	
Attributes:		One-To-Many	

MRDPenetration1

	MRD		Penetration
MRD		1	∞ StrMRD
Attributes:		One-To-Many	
Attributes:		Enforced	

ReportsMRD

	Reports		MRD
ReportNumber		1	∞ MapSysReport
Attributes:		One-To-Many	
Attributes:		Enforced	

Survivability CodeMRD

	Survivability Code		MRD
SCode		1	∞ SCode
Attributes:		Enforced	
Attributes:		One-To-Many	

Table Indexes

Name	Number of Fields
DrawingsMRD	1
Clustered:	False
Distinct Count:	158
Foreign:	True
Ignore Nulls:	False
Name:	DrawingsMRD
Primary:	False
Required:	False
Unique:	False
Fields:	MapDwgNumber, Ascending
MapDwgNumber	1

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Clustered:	False
Distinct Count:	158
Foreign:	False
Ignore Nulls:	False
Name:	MapDwgNumber
Primary:	False
Required:	False
Unique:	False
Fields:	MapDwgNumber, Ascending
MapSysReport	1
Clustered:	False
Distinct Count:	87
Foreign:	False
Ignore Nulls:	False
Name:	MapSysReport
Primary:	False
Required:	False
Unique:	False
Fields:	MapSysReport, Ascending
PrimaryKey	1
Clustered:	False
Distinct Count:	6607
Foreign:	False
Ignore Nulls:	False
Name:	PrimaryKey
Primary:	True
Required:	True
Unique:	True
Fields:	MRD, Ascending
ReportsMRD	1
Clustered:	False
Distinct Count:	87
Foreign:	True
Ignore Nulls:	False
Name:	ReportsMRD
Primary:	False
Required:	False
Unique:	False
Fields:	MapSysReport, Ascending
SCode	1
Clustered:	False
Distinct Count:	34
Foreign:	False
Ignore Nulls:	False
Name:	SCode
Primary:	False
Required:	False
Unique:	False
Fields:	SCode, Ascending
Survivability CodeMRD	1
Clustered:	False
Distinct Count:	34
Foreign:	True
Ignore Nulls:	False

Name:	Survivability CodeMRD
Primary:	False
Required:	False
Unique:	False
Fields:	SCode, Ascending

User Permissions

admin

Group Permissions

Admins
Users

60172719-123000

Date Created: 1/27/99 9:26:13 PM
Last Updated: 3/27/99 12:53:53 AM
Orientation: 0

Def. Updatable:	False
OrderByOn:	False
RecordCount:	83

Name	Type	Size
FMRD	Text	14
AllowZeroLength: False Attributes: Variable Length Collating Order: General ColumnHidden: False ColumnOrder: Default ColumnWidth: Default DisplayControl: Text Box Ordinal Position: 1 Required: False Source Field: FMRD Source Table: MRD and FMRD		
FMT	Text	14
AllowZeroLength: False Attributes: Variable Length Collating Order: General ColumnHidden: False ColumnOrder: Default ColumnWidth: Default DisplayControl: Text Box Ordinal Position: 3 Required: False Source Field: FMT Source Table: MRD and FMRD		
MRD	Text	14
AllowZeroLength: False Attributes: Variable Length Collating Order: General ColumnHidden: False ColumnOrder: Default ColumnWidth: Default DisplayControl: Text Box Ordinal Position: 4 Required: False Source Field: MRD Source Table: MRD and FMRD		
MT	Text	14
AllowZeroLength: False Attributes: Variable Length Collating Order: General ColumnHidden: False ColumnOrder: Default		

ColumnWidth:	Default
DisplayControl:	Text Box
Ordinal Position:	5
Required:	False
Source Field:	MT
Source Table:	MRD and FMRD

Table Indexes

Name	Number of Fields
PrimaryKey	2
Clustered:	False
Distinct Count:	83
Foreign:	False
Ignore Nulls:	False
Name:	PrimaryKey
Primary:	True
Required:	True
Unique:	True
Fields:	FMRD, Ascending MRD, Ascending

User Permissions

admin

Group Permissions

Admins
Users

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Properties

Date Created: 3/14/99 4:21:56 PM
Last Updated: 6/6/99 7:09:32 PM

Def. Updatable: False
OrderBy: [MRD code].A, [MRD code].B,
[MRD code].C, [MRD code].D,
[MRD code].E, [MRD code].F

OrderByOn: True
RecordCount: 1409

Orientation: 0

Columns

Name	Type	Size
A	Text	50
AllowZeroLength:	False	
Attributes:	Variable Length	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	1	
ColumnWidth:	630	
DisplayControl:	Text Box	
Ordinal Position:	1	
Required:	False	
Source Field:	A	
Source Table:	MRD code	
CodeA	Text	50
AllowZeroLength:	False	
Attributes:	Variable Length	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	Default	
ColumnWidth:	1515	
DisplayControl:	Text Box	
Ordinal Position:	2	
Required:	False	
Source Field:	CodeA	
Source Table:	MRD code	
B	Text	50
AllowZeroLength:	False	
Attributes:	Variable Length	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	Default	
ColumnWidth:	555	
DisplayControl:	Text Box	
Ordinal Position:	3	
Required:	False	
Source Field:	B	
Source Table:	MRD code	
CodeB	Text	50
AllowZeroLength:	False	
Attributes:	Variable Length	
Collating Order:	General	

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	ColumnHidden:	False		
	ColumnOrder:	Default		
	ColumnWidth:	2535		
	DisplayControl:	Text Box		
	Ordinal Position:	4		
	Required:	False		
	Source Field:	CodeB		
	Source Table:	MRD code		
C			Text	50
	AllowZeroLength:	False		
	Attributes:	Variable Length		
	Collating Order:	General		
	ColumnHidden:	False		
	ColumnOrder:	Default		
	ColumnWidth:	420		
	DisplayControl:	Text Box		
	Ordinal Position:	5		
	Required:	False		
	Source Field:	C		
	Source Table:	MRD code		
CodeC			Text	50
	AllowZeroLength:	False		
	Attributes:	Variable Length		
	Collating Order:	General		
	ColumnHidden:	False		
	ColumnOrder:	Default		
	ColumnWidth:	1905		
	DisplayControl:	Text Box		
	Ordinal Position:	6		
	Required:	False		
	Source Field:	CodeC		
	Source Table:	MRD code		
D			Text	50
	AllowZeroLength:	False		
	Attributes:	Variable Length		
	Collating Order:	General		
	ColumnHidden:	False		
	ColumnOrder:	Default		
	ColumnWidth:	465		
	DisplayControl:	Text Box		
	Ordinal Position:	7		
	Required:	False		
	Source Field:	D		
	Source Table:	MRD code		
CodeD			Text	50
	AllowZeroLength:	False		
	Attributes:	Variable Length		
	Collating Order:	General		
	ColumnHidden:	False		
	ColumnOrder:	Default		
	ColumnWidth:	1365		
	DisplayControl:	Text Box		
	Ordinal Position:	8		

	Required:	False		
	Source Field:	CodeD		
	Source Table:	MRD code		
E			Text	50
	AllowZeroLength:	False		
	Attributes:	Variable Length		
	Collating Order:	General		
	ColumnHidden:	False		
	ColumnOrder:	Default		
	ColumnWidth:	270		
	DisplayControl:	Text Box		
	Ordinal Position:	9		
	Required:	False		
	Source Field:	E		
	Source Table:	MRD code		
CodeE			Text	50
	AllowZeroLength:	False		
	Attributes:	Variable Length		
	Collating Order:	General		
	ColumnHidden:	False		
	ColumnOrder:	Default		
	ColumnWidth:	1020		
	DisplayControl:	Text Box		
	Ordinal Position:	10		
	Required:	False		
	Source Field:	CodeE		
	Source Table:	MRD code		
F			Text	50
	AllowZeroLength:	False		
	Attributes:	Variable Length		
	Collating Order:	General		
	ColumnHidden:	False		
	ColumnOrder:	Default		
	ColumnWidth:	270		
	DisplayControl:	Text Box		
	Ordinal Position:	11		
	Required:	False		
	Source Field:	F		
	Source Table:	MRD code		
CodeF			Text	50
	AllowZeroLength:	False		
	Attributes:	Variable Length		
	Collating Order:	General		
	ColumnHidden:	False		
	ColumnOrder:	Default		
	ColumnWidth:	960		
	DisplayControl:	Text Box		
	Ordinal Position:	12		
	Required:	False		
	Source Field:	CodeF		
	Source Table:	MRD code		
Notes			Text	255

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AllowZeroLength:	False
Attributes:	Variable Length
Collating Order:	General
ColumnHidden:	False
ColumnOrder:	Default
ColumnWidth:	3990
DisplayControl:	Text Box
Ordinal Position:	13
Required:	False
Source Field:	Notes
Source Table:	MRD code

Table Indexes

Name	Number of Fields
A	1
Clustered:	False
Distinct Count:	28
Foreign:	False
Ignore Nulls:	False
Name:	A
Primary:	False
Required:	False
Unique:	False
Fields:	A, Ascending
B	1
Clustered:	False
Distinct Count:	172
Foreign:	False
Ignore Nulls:	False
Name:	B
Primary:	False
Required:	False
Unique:	False
Fields:	B, Ascending
C	1
Clustered:	False
Distinct Count:	26
Foreign:	False
Ignore Nulls:	False
Name:	C
Primary:	False
Required:	False
Unique:	False
Fields:	C, Ascending
D	1
Clustered:	False
Distinct Count:	13
Foreign:	False
Ignore Nulls:	False
Name:	D
Primary:	False
Required:	False
Unique:	False

E	Fields:	D, Ascending
		1
	Clustered:	False
	Distinct Count:	9
	Foreign:	False
	Ignore Nulls:	False
	Name:	E
	Primary:	False
	Required:	False
	Unique:	False
	Fields:	E, Ascending

User Permissions

admin

Group Permissions

Admins
Users

060627-122209

Properties

Date Created:	8/7/98 10:20:36 PM	Def. Updatable:	False
Last Updated:	2/10/99 11:07:43 PM	OrderByOn:	False
Orientation:	0	RecordCount:	5586

Columns

Name	Type	Size
PrEng	Number (Long)	4
AllowZeroLength:	False	
Attributes:	Fixed Size	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	Default	
ColumnWidth:	540	
Decimal Places:	Auto	
Default Value:	0	
Description:	Project Manufacture Engineer	
DisplayControl:	Text Box	
Ordinal Position:	1	
Required:	False	
Source Field:	PrEng	
Source Table:	Orders	
MEng	Number (Long)	4
AllowZeroLength:	False	
Attributes:	Fixed Size	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	Default	
ColumnWidth:	495	
Decimal Places:	Auto	
Default Value:	0	
Description:	Manufacture Engineer	
DisplayControl:	Text Box	
Ordinal Position:	2	
Required:	False	
Source Field:	MEng	
Source Table:	Orders	
InstPartNumber	Text	50
AllowZeroLength:	False	
Attributes:	Variable Length	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	Default	
ColumnWidth:	1620	
Description:	Installation Part Number	
DisplayControl:	Text Box	
Ordinal Position:	3	
Required:	False	
Source Field:	InstPartNumber	
Source Table:	Orders	

PartNumber		Text	50
AllowZeroLength:	False		
Attributes:	Variable Length		
Collating Order:	General		
ColumnHidden:	False		
ColumnOrder:	Default		
ColumnWidth:	1815		
Description:	PartNumber		
DisplayControl:	Text Box		
Ordinal Position:	4		
Required:	False		
Source Field:	PartNumber		
Source Table:	Orders		

OrderDate		Date/Time	8
AllowZeroLength:	False		
Attributes:	Fixed Size		
Collating Order:	General		
ColumnHidden:	False		
ColumnOrder:	Default		
ColumnWidth:	1065		
Description:	Order Date		
Format:	Medium Date		
Ordinal Position:	5		
Required:	False		
Source Field:	OrderDate		
Source Table:	Orders		

Manufacturer		Text	50
AllowZeroLength:	False		
Attributes:	Variable Length		
Collating Order:	General		
ColumnHidden:	False		
ColumnOrder:	Default		
ColumnWidth:	Default		
Description:	Manufacturer		
DisplayControl:	Text Box		
Ordinal Position:	6		
Required:	False		
Source Field:	Manufacturer		
Source Table:	Orders		

VendorNumber		Text	50
AllowZeroLength:	False		
Attributes:	Variable Length		
Collating Order:	General		
ColumnHidden:	False		
ColumnOrder:	Default		
ColumnWidth:	Default		
Description:	Vendor Number		
DisplayControl:	Text Box		
Ordinal Position:	7		
Required:	False		
Source Field:	VendorNumber		
Source Table:	Orders		

Efrom		Number (Long)	4
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Field	Value	Field	Value	Field	Value
Efto	AllowZeroLength: False Attributes: Fixed Size Collating Order: General ColumnHidden: False ColumnOrder: Default ColumnWidth: 510 Decimal Places: Auto Default Value: 0 Description: From aircraft number DisplayControl: Text Box Ordinal Position: 9 Required: False Source Field: Efto Source Table: Orders	Number (Long)	4		
Qty	AllowZeroLength: False Attributes: Fixed Size Collating Order: General ColumnHidden: False ColumnOrder: Default ColumnWidth: 465 Decimal Places: Auto Default Value: 0 Description: Quantity per aircraft DisplayControl: Text Box Ordinal Position: 10 Required: False Source Field: Qty Source Table: Orders	Number (Long)	4		
WBS	AllowZeroLength: False Attributes: Fixed Size Collating Order: General ColumnHidden: False ColumnOrder: Default ColumnWidth: 675 Decimal Places: Auto Default Value: 0 Description: Work Basic Structure	Number (Long)	4		

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DisplayControl:	Text Box
Ordinal Position:	12
Required:	False
Source Field:	WBS
Source Table:	Orders

Relationships

ManagementOrders

	Management		Orders
	Eng	1	∞ MEng
Attributes:			Enforced
Attributes:			One-To-Many

ManagementOrders1

	Management		Orders
	Eng	1	∞ PrEng
Attributes:			Enforced
Attributes:			One-To-Many

ManufacturerOrders

	Manufacturer		Orders
	Company	1	∞ Manufacturer
Attributes:			Enforced
Attributes:			One-To-Many

PartsOrders

	Parts		Orders
	PartNumber	1	∞ PartNumber
Attributes:			Enforced
Attributes:			One-To-Many

PartsOrders1

Parts	Orders
PartNumber	1 ∞ InstPartNumber
Attributes:	Enforced
Attributes:	One-To-Many

PartsOrders2

Parts	Orders
PartNumber	1 ∞ PartNumber
Attributes:	Enforced
Attributes:	One-To-Many

WBSOrders

WBS	Orders
WBS	1 ∞ WBS
Attributes:	Enforced
Attributes:	One-To-Many

Table Indexes

Name	Number of Fields
ManagementOrders	1
Clustered:	False
Distinct Count:	11
Foreign:	True
Ignore Nulls:	False
Name:	ManagementOrders
Primary:	False
Required:	False
Unique:	False
Fields:	MEng, Ascending
ManagementOrders1	1
Clustered:	False
Distinct Count:	1
Foreign:	True
Ignore Nulls:	False
Name:	ManagementOrders1
Primary:	False
Required:	False
Unique:	False
Fields:	PrEng, Ascending
Manufacturer	1

Clustered:	False
Distinct Count:	102
Foreign:	False
Ignore Nulls:	False
Name:	Manufacturer
Primary:	False
Required:	False
Unique:	False
Fields:	Manufacturer, Ascending
ManufacturerOrders	1
Clustered:	False
Distinct Count:	102
Foreign:	True
Ignore Nulls:	False
Name:	ManufacturerOrders
Primary:	False
Required:	False
Unique:	False
Fields:	Manufacturer, Ascending
OrdersPartNumber	1
Clustered:	False
Distinct Count:	4287
Foreign:	False
Ignore Nulls:	False
Name:	OrdersPartNumber
Primary:	False
Required:	False
Unique:	False
Fields:	PartNumber, Ascending
PartsOrders	1
Clustered:	False
Distinct Count:	4287
Foreign:	True
Ignore Nulls:	False
Name:	PartsOrders
Primary:	False
Required:	False
Unique:	False
Fields:	PartNumber, Ascending
PartsOrders1	1
Clustered:	False
Distinct Count:	1762
Foreign:	True
Ignore Nulls:	False
Name:	PartsOrders1
Primary:	False
Required:	False
Unique:	False
Fields:	InstPartNumber, Ascending
PartsOrders2	1
Clustered:	False
Distinct Count:	4287
Foreign:	True
Ignore Nulls:	False

	Name:	PartsOrders2
	Primary:	False
	Required:	False
	Unique:	False
	Fields:	PartNumber, Ascending
PrEng		1
	Clustered:	False
	Distinct Count:	1
	Foreign:	False
	Ignore Nulls:	False
	Name:	PrEng
	Primary:	False
	Required:	False
	Unique:	False
	Fields:	PrEng, Ascending
PrimaryKey		4
	Clustered:	False
	Distinct Count:	5586
	Foreign:	False
	Ignore Nulls:	False
	Name:	PrimaryKey
	Primary:	True
	Required:	True
	Unique:	True
	Fields:	MEng, Ascending InstPartNumber, Ascending PartNumber, Ascending OrderDate, Ascending
WBS		1
	Clustered:	False
	Distinct Count:	125
	Foreign:	False
	Ignore Nulls:	False
	Name:	WBS
	Primary:	False
	Required:	False
	Unique:	False
	Fields:	WBS, Ascending
WBSOrders		1
	Clustered:	False
	Distinct Count:	125
	Foreign:	True
	Ignore Nulls:	False
	Name:	WBSOrders
	Primary:	False
	Required:	False
	Unique:	False
	Fields:	WBS, Ascending

User Permissions

admin

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Group Permissions

Admins
Users

6062734300

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Properties

Date Created:	4/26/98 7:47:59 PM	Def. Updatable:	False
Last Updated:	6/29/99 10:57:32 PM	OrderByOn:	False
Orientation:	0	RecordCount:	6134

Columns

Name	Type	Size
PartNumber	Text	50
AllowZeroLength:	False	
Attributes:	Variable Length	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	1	
ColumnWidth:	1695	
Description:	Part Number	
DisplayControl:	Text Box	
Ordinal Position:	1	
Required:	False	
Source Field:	PartNumber	
Source Table:	Parts	
PartName	Text	50
AllowZeroLength:	False	
Attributes:	Variable Length	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	Default	
ColumnWidth:	3585	
Description:	Part Name	
DisplayControl:	Text Box	
Ordinal Position:	2	
Required:	False	
Source Field:	PartName	
Source Table:	Parts	
T	Text	50
AllowZeroLength:	False	
Attributes:	Variable Length	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	Default	
ColumnWidth:	450	
Description:	Type	
DisplayControl:	Text Box	
Ordinal Position:	3	
Required:	False	
Source Field:	T	
Source Table:	Parts	
Width	Number (Double)	8
AllowZeroLength:	False	
Attributes:	Fixed Size	

Collating Order:	General
ColumnHidden:	False
ColumnOrder:	Default
ColumnWidth:	705
Decimal Places:	3
Default Value:	0
Description:	Width in inch
DisplayControl:	Text Box
Format:	Fixed
Ordinal Position:	4
Required:	False
Source Field:	Width
Source Table:	Parts

Length		Number (Double)	8
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AllowZeroLength:	False
Attributes:	Fixed Size
Collating Order:	General
ColumnHidden:	False
ColumnOrder:	Default
ColumnWidth:	810
Decimal Places:	3
Default Value:	0
Description:	Length in inch
DisplayControl:	Text Box
Format:	Fixed
Ordinal Position:	5
Required:	False
Source Field:	Length
Source Table:	Parts

Height		Number (Double)	8
--------	--	-----------------	---

AllowZeroLength:	False
Attributes:	Fixed Size
Collating Order:	General
ColumnHidden:	False
ColumnOrder:	Default
ColumnWidth:	765
Decimal Places:	3
Default Value:	0
Description:	Height in inch
DisplayControl:	Text Box
Format:	Fixed
Ordinal Position:	6
Required:	False
Source Field:	Height
Source Table:	Parts

Diameter		Number (Double)	8
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AllowZeroLength:	False
Attributes:	Fixed Size
Collating Order:	General
ColumnHidden:	False
ColumnOrder:	Default
ColumnWidth:	735
Decimal Places:	3
Default Value:	0

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Description: Diameter in inch
DisplayControl: Text Box
Format: Fixed
Ordinal Position: 7
Required: False
Source Field: Diameter
Source Table: Parts

Thickness Number (Double) 8

AllowZeroLength: False
Attributes: Fixed Size
Collating Order: General
ColumnHidden: False
ColumnOrder: Default
ColumnWidth: 1080
Decimal Places: 3
Default Value: 0
Description: Thickness in inch
DisplayControl: Text Box
Format: Fixed
Ordinal Position: 8
Required: False
Source Field: Thickness
Source Table: Parts

Material Text 50

AllowZeroLength: False
Attributes: Variable Length
Collating Order: General
ColumnHidden: False
ColumnOrder: Default
ColumnWidth: 540
Description: Material
DisplayControl: Text Box
Ordinal Position: 9
Required: False
Source Field: Material
Source Table: Parts

Weight Number (Double) 8

AllowZeroLength: False
Attributes: Fixed Size
Collating Order: General
ColumnHidden: False
ColumnOrder: Default
ColumnWidth: 945
Decimal Places: 3
Default Value: 0
Description: Weight in lb
DisplayControl: Text Box
Format: Fixed
Ordinal Position: 10
Required: False
Source Field: Weight
Source Table: Parts

50473748-123000

Relationships

PartsAction answer

Parts	Action answer
PartNumber	1 ∞ PartNumber
Attributes:	Enforced
Attributes:	One-To-Many

PartsAMO and MRD

Parts	AMO and MRD
PartNumber	1 ∞ PartNumber
Attributes:	One-To-Many
Attributes:	Enforced

PartsAssembly

Parts	Assembly
PartNumber	1 ∞ PartNumber
Attributes:	One-To-Many
Attributes:	Enforced

PartsAssembly1

Parts	Assembly
PartNumber	1 ∞ InstPartNumber
Attributes:	One-To-Many
Attributes:	Enforced

PartsBay and Door

Parts	Bay and Door
PartNumber	1 ∞ InstPartNumber
Attributes:	One-To-Many
Attributes:	Enforced

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PartsDesign-to-cost analysis

Parts	Design-to-cost analysis
PartNumber	PartNumber
Attributes:	One-To-One
Attributes:	Unique, Enforced

PartsDoor attachment

Parts	Door attachment
PartNumber	PartNumber
Attributes:	One-To-Many
Attributes:	Enforced

PartsLLI

Parts	LLI
PartNumber	PartNumber
Attributes:	Unique, Enforced
Attributes:	One-To-One

PartsMaintenance

Parts	Maintenance
PartNumber	PartNumber
Attributes:	One-To-One
Attributes:	Unique, Enforced

PartsMaintenance service

Parts	Maintenance service
PartNumber	PartNumber
Attributes:	One-To-Many
Attributes:	Enforced

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	Parts			Components
	PartNumber	1	∞	PartNumber
	Attributes:			
	Attributes:		One-To-Many	
			Enforced	

Parts		Orders
PartNumber	1 ∞	PartNumber
Attributes:		One-To-Many
Attributes:		Enforced

Parts		Orders	
PartNumber		1	∞ InstPartNumber
Attributes:			
Attributes:		One-To-Many	
		Enforced	

Parts		Orders	
PartNumber		1	∞ PartNumber
Attributes:		Enforced	
Attributes:		One-To-Many	

Parts		Preferred parts list	
PartNumber	1	1	PartNumber
Attributes:	One-To-One		
Attributes:	Unique, Enforced		

PartsProcure

Parts	Procure
PartNumber	1 ∞ PartNumber
Attributes:	One-To-Many
Attributes:	Enforced

PartsProduction routcard

Parts	Production routcard
PartNumber	1 ∞ PartNumber
Attributes:	One-To-Many
Attributes:	Enforced

PartsPS and Parts

Parts	PS and Parts
PartNumber	1 ∞ PartNumber
Attributes:	One-To-Many
Attributes:	Enforced

PartsReliability

Parts	Reliability
PartNumber	1 1 PartNumber
Attributes:	One-To-One
Attributes:	Unique, Enforced

PartsTechnical data

Parts	Technical data
PartNumber	1 1 PartNumber
Attributes:	Unique, Enforced
Attributes:	One-To-One

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Technology

1	1	PartNumber
---	---	------------

One-To-One
Unique, Enforced

Parts

Tools and parts

1 ∞ PartNumber

One-To-Many Enforced

Parts

Tools and parts

1 ∞ ToolPartN

One-To-Many Enforced

Parts

Tshop and parts

1 ∞ PartNumber

One-To-Many Enforced

Parts

Vibration

1	1	PartNumber
---	---	------------

One-To-One
Unique, Enforced

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PartsWeight

Parts		Weight
PartNumber	1	1
Attributes:	One-To-One	
Attributes:	Unique, Enforced	

PartsWPart

Parts		WPart
PartNumber	1	1
Attributes:	Unique, Enforced	
Attributes:	One-To-One	

Table Indexes

Name	Number of Fields
PrimaryKey	1
Clustered:	False
Distinct Count:	6134
Foreign:	False
Ignore Nulls:	False
Name:	PrimaryKey
Primary:	True
Required:	True
Unique:	True
Fields:	PartNumber, Ascending

User Permissions

admin

Group Permissions

Admins
Users

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Properties

Date Created: 4/27/98 8:42:42 PM
Last Updated: 5/23/99 9:44:46 PM
OrderByOn: False
RecordCount: 6083

Def. Updatable: False
OrderBy: Penetration.RepNumber
Orientation: 0

Columns

Name	Type	Size
StrMRD	Text	14
AllowZeroLength:	False	
Attributes:	Variable Length	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	Default	
ColumnWidth:	1230	
Description:	Structural Map Reference Designator	
DisplayControl:	Text Box	
Ordinal Position:	1	
Required:	False	
Source Field:	StrMRD	
Source Table:	Penetration	
Num	Number (Long)	4
AllowZeroLength:	False	
Attributes:	Fixed Size	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	Default	
ColumnWidth:	585	
Decimal Places:	Auto	
Default Value:	0	
Description:	Structural part hole number	
DisplayControl:	Text Box	
Ordinal Position:	2	
Required:	False	
Source Field:	Num	
Source Table:	Penetration	
SysMRD	Text	14
AllowZeroLength:	False	
Attributes:	Variable Length	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	Default	
ColumnWidth:	1185	
Description:	System Map Reference Designator	
DisplayControl:	Text Box	
Ordinal Position:	3	
Required:	False	
Source Field:	SysMRD	
Source Table:	Penetration	

BL	AllowZeroLength: False Attributes: Fixed Size Collating Order: General ColumnHidden: False ColumnOrder: Default ColumnWidth: 645 Decimal Places: 3 Default Value: 0 Description: BL in inch DisplayControl: Text Box Ordinal Position: 4 Required: False Source Field: BL Source Table: Penetration	Number (Double)	8
STA	AllowZeroLength: False Attributes: Fixed Size Collating Order: General ColumnHidden: False ColumnOrder: Default ColumnWidth: 765 Decimal Places: 3 Default Value: 0 Description: STA in inch DisplayControl: Text Box Ordinal Position: 5 Required: False Source Field: STA Source Table: Penetration	Number (Double)	8
WL	AllowZeroLength: False Attributes: Fixed Size Collating Order: General ColumnHidden: False ColumnOrder: Default ColumnWidth: 720 Decimal Places: 3 Default Value: 0 Description: WL in inch DisplayControl: Text Box Ordinal Position: 6 Required: False Source Field: WL Source Table: Penetration	Number (Double)	8
Diam	AllowZeroLength: False Attributes: Fixed Size Collating Order: General ColumnHidden: False ColumnOrder: Default ColumnWidth: 645 Decimal Places: 3 Default Value: 0	Number (Double)	8

Description:	Structure Part penetration diameter in Inch
DisplayControl:	Text Box
Ordinal Position:	7
Required:	False
Source Field:	Diam
Source Table:	Penetration

RepNumber	Text	50
AllowZeroLength:	False	
Attributes:	Variable Length	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	Default	
ColumnWidth:	Default	
Description:	Penetration report number	
DisplayControl:	Text Box	
Ordinal Position:	8	
Required:	False	
Source Field:	RepNumber	
Source Table:	Penetration	

Notes	Text	255
AllowZeroLength:	False	
Attributes:	Variable Length	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	Default	
ColumnWidth:	2955	
Description:	Notes	
DisplayControl:	Text Box	
Ordinal Position:	9	
Required:	False	
Source Field:	Notes	
Source Table:	Penetration	

Relationships

MRDPenetration

MRD	MRD	Penetration
	1	∞ SysMRD

Attributes:	Enforced
Attributes:	One-To-Many

MRDPenetration1

MRD	MRD	Penetration
	1	∞ StrMRD

Attributes:	Enforced
Attributes:	One-To-Many

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Table Indexes

Name	Number of Fields
MRDPenetration	1
Clustered:	False
Distinct Count:	1633
Foreign:	True
Ignore Nulls:	False
Name:	MRDPenetration
Primary:	False
Required:	False
Unique:	False
Fields:	SysMRD, Ascending
MRDPenetration1	1
Clustered:	False
Distinct Count:	409
Foreign:	True
Ignore Nulls:	False
Name:	MRDPenetration1
Primary:	False
Required:	False
Unique:	False
Fields:	StrMRD, Ascending
Num	1
Clustered:	False
Distinct Count:	47
Foreign:	False
Ignore Nulls:	False
Name:	Num
Primary:	False
Required:	False
Unique:	False
Fields:	Num, Ascending
PrimaryKey	3
Clustered:	False
Distinct Count:	6083
Foreign:	False
Ignore Nulls:	False
Name:	PrimaryKey
Primary:	True
Required:	True
Unique:	True
Fields:	StrMRD, Ascending Num, Ascending SysMRD, Ascending
RepNumber	1
Clustered:	False
Distinct Count:	1
Foreign:	False
Ignore Nulls:	False
Name:	RepNumber
Primary:	False

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Required: False
Unique: False
Fields: RepNumber, Ascending

admin

Admins
Users

[illegible]

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Properties

Date Created:	7/17/98 7:02:36 PM	Def. Updatable:	False
Last Updated:	6/29/99 11:28:57 PM	OrderBy:	Personnel.Dept
OrderByOn:	True	Orientation:	0
RecordCount:	741		

Columns

Name	Type	Size
ID	Number (Long)	4
AllowZeroLength:	False	
Attributes:	Fixed Size	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	Default	
ColumnWidth:	990	
Decimal Places:	Auto	
Default Value:	0	
DisplayControl:	Text Box	
Ordinal Position:	1	
Required:	False	
Source Field:	ID	
Source Table:	Personnel	
Eng	Number (Long)	4
AllowZeroLength:	False	
Attributes:	Fixed Size	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	Default	
ColumnWidth:	510	
Decimal Places:	Auto	
Default Value:	0	
DisplayControl:	Text Box	
Ordinal Position:	2	
Required:	False	
Source Field:	Eng	
Source Table:	Personnel	
Surname	Text	50
AllowZeroLength:	False	
Attributes:	Variable Length	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	Default	
ColumnWidth:	1455	
DisplayControl:	Text Box	
Ordinal Position:	3	
Required:	False	
Source Field:	Surname	
Source Table:	Personnel	
Name	Text	50

Position	Text	50
----------	------	----

Dept	Number (Long)	
4		

Number (Long)	4
---------------	---

Phone	Number (Long)	4
-------	---------------	---

Number (Long)	4
---------------	---

Fax	AllowZeroLength:	False	Number (Long)	4
-----	------------------	-------	---------------	---

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Attributes: Fixed Size
Collating Order: General
ColumnHidden: False
ColumnOrder: Default
ColumnWidth: 570
Decimal Places: Auto
Default Value: 0
DisplayControl: Text Box
Ordinal Position: 8
Required: False
Source Field: Fax
Source Table: Personnel

MID

AllowZeroLength: False
Attributes: Fixed Size
Collating Order: General
ColumnHidden: False
ColumnOrder: Default
ColumnWidth: 990
Decimal Places: Auto
Default Value: 0
Description: Manager ID
DisplayControl: Text Box
Ordinal Position: 9
Required: False
Source Field: MID
Source Table: Personnel

Number (Long)

4

Relationships

PersonnelDrawings

Personnel

Drawings

ID

1 ∞ IDesigner

Attributes: Enforced
Attributes: One-To-Many

PersonnelDrawings order

Personnel

Drawings order

ID

1 ∞ IDesigner

Attributes: One-To-Many
Attributes: Enforced

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PersonnelLLI

	Personnel	LLI
ID	1	∞ ID
Attributes:	One-To-Many	
Attributes:	Enforced	

PersonnelLRU

	Personnel	LRU
ID	1	∞ ID
Attributes:	Enforced	
Attributes:	One-To-Many	

PersonnelManagement

	Personnel	Management
ID	1	∞ ID
Attributes:	Enforced	
Attributes:	One-To-Many	

PersonnelManagement1

	Personnel	Management
ID	1	∞ ID
Attributes:	One-To-Many	
Attributes:	Enforced	

PersonnelManagement2

	Personnel	Management
ID	1	∞ ID
Attributes:	One-To-Many	
Attributes:	Enforced	

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50173748-123000

PersonnelProcurement

Personnel	Procurement
ID	1 ∞ Clark
Attributes:	Enforced
Attributes:	One-To-Many

Table Indexes

Name	Number of Fields
MID	1
Clustered:	False
Distinct Count:	152
Foreign:	False
Ignore Nulls:	False
Name:	MID
Primary:	False
Required:	False
Unique:	False
Fields:	MID, Ascending
PrimaryKey	1
Clustered:	False
Distinct Count:	741
Foreign:	False
Ignore Nulls:	False
Name:	PrimaryKey
Primary:	True
Required:	True
Unique:	True
Fields:	ID, Ascending

User Permissions

admin

Group Permissions

Admins
Users

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Properties

Date Created:	4/29/98 7:31:39 PM	Def. Updatable:	False
Last Updated:	12/15/98 9:42:23 PM	OrderByOn:	False
Orientation:	0	RecordCount:	269

Columns

Name	Type	Size
ReportNumber	Text	50
AllowZeroLength:	False	
Attributes:	Variable Length	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	1	
ColumnWidth:	Default	
Description:	Report Number	
DisplayControl:	Text Box	
Ordinal Position:	1	
Required:	False	
Source Field:	ReportNumber	
Source Table:	Preferred parts list	
PartNumber	Text	50
AllowZeroLength:	False	
Attributes:	Variable Length	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	Default	
ColumnWidth:	1800	
Description:	Part Number	
DisplayControl:	Text Box	
Ordinal Position:	2	
Required:	False	
Source Field:	PartNumber	
Source Table:	Preferred parts list	
PartName	Text	50
AllowZeroLength:	False	
Attributes:	Variable Length	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	Default	
ColumnWidth:	3690	
Description:	Part Name	
DisplayControl:	Text Box	
Ordinal Position:	3	
Required:	False	
Source Field:	PartName	
Source Table:	Preferred parts list	
Weight	Number (Double)	8
AllowZeroLength:	False	
Attributes:	Fixed Size	

Collating Order:	General
ColumnHidden:	False
ColumnOrder:	Default
ColumnWidth:	825
Decimal Places:	3
Default Value:	0
Description:	Weight in lb
DisplayControl:	Text Box
Ordinal Position:	4
Required:	False
Source Field:	Weight
Source Table:	Preferred parts list

Relationships

PartsPreferred parts

Parts	Preferred parts list
PartNumber	PartNumber
Attributes:	Unique, Enforced
Attributes:	One-To-One

Table Indexes

Name	Number of Fields
PartsPreferred parts	1
Clustered:	False
Distinct Count:	269
Foreign:	True
Ignore Nulls:	False
Name:	PartsPreferred parts
Primary:	False
Required:	False
Unique:	True
Fields:	PartNumber, Ascending
PrimaryKey	1
Clustered:	False
Distinct Count:	269
Foreign:	False
Ignore Nulls:	False
Name:	PrimaryKey
Primary:	True
Required:	True
Unique:	True
Fields:	PartNumber, Ascending
ReportNumber	1
Clustered:	False
Distinct Count:	2
Foreign:	False
Ignore Nulls:	False
Name:	ReportNumber

Primary:	False
Required:	False
Unique:	False
Fields:	ReportNumber, Ascending

User Permissions

admin

Group Permissions

Admins
Users

60172718:123099

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Properties

Date Created:	4/27/98 9:35:11 PM	Def. Updatable:	False
Last Updated:	1/30/99 12:41:48 AM	OrderByOn:	False
Orientation:	0	RecordCount:	4289

Columns

Name	Type	Size
Invoice	Number (Long)	4
AllowZeroLength:	False	
Attributes:	Fixed Size	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	Default	
ColumnWidth:	840	
Decimal Places:	Auto	
Default Value:	0	
Description:	Invoice	
DisplayControl:	Text Box	
Ordinal Position:	1	
Required:	False	
Source Field:	Invoice	
Source Table:	Procure	
Item	Number (Long)	4
AllowZeroLength:	False	
Attributes:	Fixed Size	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	Default	
ColumnWidth:	435	
Decimal Places:	Auto	
Default Value:	0	
Description:	Invoice Items	
DisplayControl:	Text Box	
Ordinal Position:	2	
Required:	False	
Source Field:	Item	
Source Table:	Procure	
PartNumber	Text	50
AllowZeroLength:	False	
Attributes:	Variable Length	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	Default	
ColumnWidth:	1800	
Description:	Part Number	
DisplayControl:	Text Box	
Ordinal Position:	3	
Required:	False	
Source Field:	PartNumber	
Source Table:	Procure	

Manufacturer	Text	50
AllowZeroLength:	False	
Attributes:	Variable Length	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	Default	
ColumnWidth:	Default	
DisplayControl:	Text Box	
Ordinal Position:	4	
Required:	False	
Source Field:	Manufacturer	
Source Table:	Procure	
VendorNumber	Text	50
AllowZeroLength:	False	
Attributes:	Variable Length	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	Default	
ColumnWidth:	Default	
DisplayControl:	Text Box	
Ordinal Position:	5	
Required:	False	
Source Field:	VendorNumber	
Source Table:	Procure	
Qty	Number (Long)	4
AllowZeroLength:	False	
Attributes:	Fixed Size	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	Default	
ColumnWidth:	465	
Decimal Places:	Auto	
Default Value:	0	
Description:	Quantity	
DisplayControl:	Text Box	
Ordinal Position:	6	
Required:	False	
Source Field:	Qty	
Source Table:	Procure	
Price	Currency	8
AllowZeroLength:	False	
Attributes:	Fixed Size	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	Default	
ColumnWidth:	1260	
Decimal Places:	2	
Default Value:	0	
Description:	Price	
Format:	##,###0.00;(\$#,##0.00)	
Ordinal Position:	7	
Required:	False	
Source Field:	Price	
Source Table:	Procure	

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Relationships

PartsProcure

Parts	Procure
PartNumber	1 ∞ PartNumber
Attributes:	Enforced
Attributes:	One-To-Many

ProcurementProcure

Procurement	Procure
Invoice	1 ∞ Invoice
Attributes:	Enforced
Attributes:	One-To-Many

Table Indexes

Name	Number of Fields
Manufacturer	1
Clustered:	False
Distinct Count:	102
Foreign:	False
Ignore Nulls:	False
Name:	Manufacturer
Primary:	False
Required:	False
Unique:	False
Fields:	Manufacturer, Ascending
PartsProcure	1
Clustered:	False
Distinct Count:	4289
Foreign:	True
Ignore Nulls:	False
Name:	PartsProcure
Primary:	False
Required:	False
Unique:	False
Fields:	PartNumber, Ascending
PrimaryKey	3
Clustered:	False
Distinct Count:	4289
Foreign:	False
Ignore Nulls:	False
Name:	PrimaryKey
Primary:	True
Required:	True

Unique:	True
Fields:	Invoice, Ascending Item, Ascending PartNumber, Ascending
ProcurementProcure	1
Clustered:	False
Distinct Count:	1447
Foreign:	True
Ignore Nulls:	False
Name:	ProcurementProcure
Primary:	False
Required:	False
Unique:	False
Fields:	Invoice, Ascending
VendorNumber	1
Clustered:	False
Distinct Count:	865
Foreign:	False
Ignore Nulls:	False
Name:	VendorNumber
Primary:	False
Required:	False
Unique:	False
Fields:	VendorNumber, Ascending

User Permissions

admin

Group Permissions

Admins
Users

Properties

Date Created:	4/27/98 9:31:37 PM	Def. Updatable:	False
Last Updated:	6/29/99 10:41:39 PM	OrderByOn:	False
Orientation:	0	RecordCount:	1810

Columns

Name	Type	Size
Invoice	Number (Long)	4
AllowZeroLength:	False	
Attributes:	Fixed Size, Auto-Increment	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	Default	
ColumnWidth:	840	
Description:	Invoice	
Ordinal Position:	1	
Required:	False	
Source Field:	Invoice	
Source Table:	Procurement	
ProEng	Number (Long)	4
AllowZeroLength:	False	
Attributes:	Fixed Size	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	Default	
ColumnWidth:	840	
Decimal Places:	Auto	
Default Value:	0	
Description:	Procurement Engineer Number	
DisplayControl:	Text Box	
Ordinal Position:	2	
Required:	False	
Source Field:	ProEng	
Source Table:	Procurement	
Clark	Number (Long)	4
AllowZeroLength:	False	
Attributes:	Fixed Size	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	Default	
ColumnWidth:	990	
Decimal Places:	Auto	
Default Value:	0	
Description:	Clark Identification Number	
DisplayControl:	Text Box	
Ordinal Position:	3	
Required:	False	
Source Field:	Clark	
Source Table:	Procurement	

Supplier		Text	50
AllowZeroLength:	False		
Attributes:	Variable Length		
Collating Order:	General		
ColumnHidden:	False		
ColumnOrder:	Default		
ColumnWidth:	1770		
Description:	Supplier		
DisplayControl:	Text Box		
Ordinal Position:	5		
Required:	False		
Source Field:	Supplier		
Source Table:	Procurement		

SupplyDate		Date/Time	8
AllowZeroLength:	False		
Attributes:	Fixed Size		
Collating Order:	General		
ColumnHidden:	False		
ColumnOrder:	Default		
ColumnWidth:	1245		
Description:	Supply Date		
Format:	Medium Date		
Ordinal Position:	6		
Required:	False		
Source Field:	SupplyDate		
Source Table:	Procurement		

Relationships

ManagementProcurement

Management		Procurement
Eng	1 ∞ ProEng	
Attributes:	Enforced	
Attributes:	One-To-Many	

PersonnelProcurement

Personnel		Procurement
ID	1 ∞ Clark	
Attributes:	Enforced	
Attributes:	One-To-Many	

Procurement		Procurement	
Invoice	1	∞	Invoice
Attributes:	Enforced		
Attributes:	One-To-Many		

Supplier	Procurement	
Company	1	∞ Supplier
Attributes:	Enforced	
Attributes:	One-To-Many	

Name	Number of Fields
Clark	1
Clustered:	False
Distinct Count:	5
Foreign:	False
Ignore Nulls:	False
Name:	Clark
Primary:	False
Required:	False
Unique:	False
Fields:	Clark, Ascending
ManagementProcurement	1
Clustered:	False
Distinct Count:	1
Foreign:	True
Ignore Nulls:	False
Name:	ManagementProcurement
Primary:	False
Required:	False
Unique:	False
Fields:	ProEng, Ascending
PersonnelProcurement	1
Clustered:	False
Distinct Count:	5
Foreign:	True
Ignore Nulls:	False
Name:	PersonnelProcurement
Primary:	False
Required:	False
Unique:	False
Fields:	Clark, Ascending

[illegible]

PrimaryKey	1
Clustered:	False
Distinct Count:	1810
Foreign:	False
Ignore Nulls:	False
Name:	PrimaryKey
Primary:	True
Required:	True
Unique:	True
Fields:	Invoice, Ascending
ProEng	1
Clustered:	False
Distinct Count:	1
Foreign:	False
Ignore Nulls:	False
Name:	ProEng
Primary:	False
Required:	False
Unique:	False
Fields:	ProEng, Ascending
Supplier	1
Clustered:	False
Distinct Count:	90
Foreign:	False
Ignore Nulls:	False
Name:	Supplier
Primary:	False
Required:	False
Unique:	False
Fields:	Supplier, Ascending
SupplierProcurement	1
Clustered:	False
Distinct Count:	90
Foreign:	True
Ignore Nulls:	False
Name:	SupplierProcurement
Primary:	False
Required:	False
Unique:	False
Fields:	Supplier, Ascending

User Permissions

admin

Group Permissions

Admins
Users

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Properties

Date Created:	4/26/98 9:28:22 PM	Def. Updatable:	False
FrozenColumns:	2	Last Updated:	3/5/99 6:23:28 PM
OrderByOn:	False	Orientation:	0
RecordCount:	11887	RowHeight:	270

Columns

Name	Type	Size
PartNumber	Text	50
AllowZeroLength:	False	
Attributes:	Variable Length	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	Default	
ColumnWidth:	1695	
Description:	Part Number	
DisplayControl:	Text Box	
Ordinal Position:	3	
Required:	False	
Source Field:	PartNumber	
Source Table:	Production routcard	
N	Number (Long)	4
AllowZeroLength:	False	
Attributes:	Fixed Size	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	Default	
ColumnWidth:	315	
Decimal Places:	Auto	
Default Value:	0	
DisplayControl:	Text Box	
Ordinal Position:	4	
Required:	False	
Source Field:	N	
Source Table:	Production routcard	
Operation	Text	255
AllowZeroLength:	False	
Attributes:	Variable Length	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	Default	
ColumnWidth:	7080	
Description:	Operation Description	
DisplayControl:	Text Box	
Ordinal Position:	5	
Required:	False	
Source Field:	Operation	
Source Table:	Production routcard	
Time	Number (Double)	8

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AllowZeroLength:	False
Attributes:	Fixed Size
Collating Order:	General
ColumnHidden:	False
ColumnOrder:	Default
ColumnWidth:	630
Decimal Places:	2
Default Value:	0
Description:	Time in hours
DisplayControl:	Text Box
Ordinal Position:	6
Required:	False
Source Field:	Time
Source Table:	Production routcard

Relationships

PartsProduction routcard

Parts	Production routcard
PartNumber	1 ∞ PartNumber
Attributes:	Enforced
Attributes:	One-To-Many

Production WBSProduction routcard

Production WBS	Production routcard
PartNumber	1 ∞ PartNumber
Attributes:	Enforced
Attributes:	One-To-Many

Table Indexes

Name	Number of Fields
PartsProduction routcard	1
Clustered:	False
Distinct Count:	4345
Foreign:	True
Ignore Nulls:	False
Name:	PartsProduction routcard
Primary:	False
Required:	False
Unique:	False
Fields:	PartNumber, Ascending
PrimaryKey	2
Clustered:	False
Distinct Count:	11887
Foreign:	False

Ignore Nulls:	False
Name:	PrimaryKey
Primary:	True
Required:	True
Unique:	True
Fields:	PartNumber, Ascending N, Ascending

Production WBSProduction routcard	1
Clustered:	False
Distinct Count:	4345
Foreign:	True
Ignore Nulls:	False
Name:	Production WBSProduction routcard
Primary:	False
Required:	False
Unique:	False
Fields:	PartNumber, Ascending

User Permissions

admin

Group Permissions

Admins
Users

Properties

Date Created: 8/14/98 12:05:21 AM
Last Updated: 3/5/99 5:17:00 PM
Orientation: 0

Def. Updatable: False
OrderByOn: True
RecordCount: 4347

Columns

Name	Type	Size
PEng	Number (Long)	4
AllowZeroLength: False		
Attributes: Fixed Size		
Collating Order: General		
ColumnHidden: False		
ColumnOrder: Default		
ColumnWidth: 645		
Decimal Places: Auto		
Default Value: 0		
DisplayControl: Text Box		
Ordinal Position: 1		
Required: False		
Source Field: PEng		
Source Table: Production WBS		
MEng	Number (Long)	4
AllowZeroLength: False		
Attributes: Fixed Size		
Collating Order: General		
ColumnHidden: False		
ColumnOrder: Default		
ColumnWidth: 675		
Decimal Places: Auto		
Default Value: 0		
DisplayControl: Text Box		
Ordinal Position: 2		
Required: False		
Source Field: MEng		
Source Table: Production WBS		
PartNumber	Text	50
AllowZeroLength: False		
Attributes: Variable Length		
Collating Order: General		
ColumnHidden: False		
ColumnOrder: Default		
ColumnWidth: 1695		
DisplayControl: Text Box		
Ordinal Position: 3		
Required: False		
Source Field: PartNumber		
Source Table: Production WBS		
WBS	Number (Long)	4
AllowZeroLength: False		

Attributes: Fixed Size
Collating Order: General
ColumnHidden: False
ColumnOrder: Default
ColumnWidth: 840
Decimal Places: Auto
Default Value: 0
DisplayControl: Text Box
Ordinal Position: 4
Required: False
Source Field: WBS
Source Table: Production WBS

WorkOrder Number (Long) 4

AllowZeroLength: False
Attributes: Fixed Size
Collating Order: General
ColumnHidden: False
ColumnOrder: Default
ColumnWidth: 1185
Decimal Places: Auto
Default Value: 0
DisplayControl: Text Box
Ordinal Position: 5
Required: False
Source Field: WorkOrder
Source Table: Production WBS

StartDate Date/Time 8

AllowZeroLength: False
Attributes: Fixed Size
Collating Order: General
ColumnHidden: False
ColumnOrder: Default
ColumnWidth: Default
Format: Medium Date
Ordinal Position: 6
Required: False
Source Field: StartDate
Source Table: Production WBS

FinishDate Date/Time 8

AllowZeroLength: False
Attributes: Fixed Size
Collating Order: General
ColumnHidden: False
ColumnOrder: Default
ColumnWidth: Default
Format: Medium Date
Ordinal Position: 7
Required: False
Source Field: FinishDate
Source Table: Production WBS

Relationships

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ManagementProduction WBS

Management	Production WBS
Eng	1 ∞ MEng
Attributes:	Enforced
Attributes:	One-To-Many

ManagementProduction WBS1

Management	Production WBS
Eng	1 ∞ PEng
Attributes:	Enforced
Attributes:	One-To-Many

ManagementProduction WBS2

Management	Production WBS
Eng	1 ∞ MEng
Attributes:	Enforced
Attributes:	One-To-Many

ManagementProduction WBS3

Management	Production WBS
Eng	1 ∞ PEng
Attributes:	Enforced
Attributes:	One-To-Many

Production WBSProduction routcard

Production WBS	Production routcard
PartNumber	1 ∞ PartNumber
Attributes:	Enforced
Attributes:	One-To-Many

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WBS

1 ∞ WBS

Enforced One-To-Many

WBS

1 ∞ WBS

**Enforced
One-To-Many**

Name

Number of Fields

False
13
True
False
ManagementProduction WBS
False
False
False
MEng, Ascending

1

False
1
True
False
ManagementProduction WBS1
False
False
False
PEng, Ascending

1

False
13
True
False
ManagementProduction WBS2
False
False
False
MEng, Ascending

ManagementProduction WBS3	1
Clustered:	False
Distinct Count:	1
Foreign:	True
Ignore Nulls:	False
Name:	ManagementProduction WBS3
Primary:	False
Required:	False
Unique:	False
Fields:	PEng, Ascending
MEng	1
Clustered:	False
Distinct Count:	13
Foreign:	False
Ignore Nulls:	False
Name:	MEng
Primary:	False
Required:	False
Unique:	False
Fields:	MEng, Ascending
PEng	1
Clustered:	False
Distinct Count:	1
Foreign:	False
Ignore Nulls:	False
Name:	PEng
Primary:	False
Required:	False
Unique:	False
Fields:	PEng, Ascending
PrimaryKey	1
Clustered:	False
Distinct Count:	4347
Foreign:	False
Ignore Nulls:	False
Name:	PrimaryKey
Primary:	True
Required:	True
Unique:	True
Fields:	PartNumber, Ascending
WBS	1
Clustered:	False
Distinct Count:	141
Foreign:	False
Ignore Nulls:	False
Name:	WBS
Primary:	False
Required:	False
Unique:	False
Fields:	WBS, Ascending
WBSProduction WBS	1
Clustered:	False
Distinct Count:	141
Foreign:	True

Ignore Nulls:	False
Name:	WBSProduction WBS
Primary:	False
Required:	False
Unique:	False
Fields:	WBS, Ascending
WBSProduction WBS1	1
Clustered:	False
Distinct Count:	141
Foreign:	True
Ignore Nulls:	False
Name:	WBSProduction WBS1
Primary:	False
Required:	False
Unique:	False
Fields:	WBS, Ascending
WorkOrder	1
Clustered:	False
Distinct Count:	234
Foreign:	False
Ignore Nulls:	False
Name:	WorkOrder
Primary:	False
Required:	False
Unique:	False
Fields:	WorkOrder, Ascending

User Permissions

admin

Group Permissions

Admins
Users

A-227

Properties

Date Created: 3/15/99 5:58:46 PM
Last Updated: 3/19/99 11:54:07 PM
Orientation: 0

Def. Updatable: False
OrderByOn: True
RecordCount: 102

Columns

Name	Type	Size
PSNumber	Text	50
AllowZeroLength: False		
Attributes: Variable Length		
Collating Order: General		
ColumnHidden: False		
ColumnOrder: Default		
ColumnWidth: 1170		
DisplayControl: Text Box		
Ordinal Position: 1		
Required: False		
Source Field: PSNumber		
Source Table: PS		
Subject	Text	50
AllowZeroLength: False		
Attributes: Variable Length		
Collating Order: General		
ColumnHidden: False		
ColumnOrder: Default		
ColumnWidth: 1890		
DisplayControl: Text Box		
Ordinal Position: 2		
Required: False		
Source Field: Subject		
Source Table: PS		
Title	Text	255
AllowZeroLength: False		
Attributes: Variable Length		
Collating Order: General		
ColumnHidden: False		
ColumnOrder: Default		
ColumnWidth: 3660		
DisplayControl: Text Box		
Ordinal Position: 3		
Required: False		
Source Field: Title		
Source Table: PS		

Relationships

A-228

PSPS and Parts

PS		PS and Parts	
PSNumber	1	∞	PSNumber
Attributes:		Enforced	
Attributes:		One-To-Many	

Table Indexes

Name	Number of Fields
PrimaryKey	1
Clustered:	False
Distinct Count:	102
Foreign:	False
Ignore Nulls:	False
Name:	PrimaryKey
Primary:	True
Required:	True
Unique:	True
Fields:	PSNumber, Ascending

User Permissions

admin

Group Permissions

Admins
Users

Properties

Date Created: 3/19/99 7:55:35 PM
Last Updated: 3/20/99 12:14:21 AM
Orientation: 0

Def. Updatable: False
OrderByOn: False
RecordCount: 14519

Columns

Name	Type	Size
PartNumber	Text	50
AllowZeroLength:	False	
Attributes:	Variable Length	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	Default	
ColumnWidth:	1695	
DisplayControl:	Text Box	
Ordinal Position:	1	
Required:	False	
Source Field:	PartNumber	
Source Table:	PS and Parts	
InstPartNumber	Text	50
AllowZeroLength:	False	
Attributes:	Variable Length	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	Default	
ColumnWidth:	1695	
DisplayControl:	Text Box	
Ordinal Position:	2	
Required:	False	
Source Field:	InstPartNumber	
Source Table:	PS and Parts	
PSNumber	Text	50
AllowZeroLength:	False	
Attributes:	Variable Length	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	Default	
ColumnWidth:	1170	
DisplayControl:	Text Box	
Ordinal Position:	3	
Required:	False	
Source Field:	PSNumber	
Source Table:	PS and Parts	

Relationships

A-230

PartsPS and Parts

Parts	PS and Parts
PartNumber	1 ∞ PartNumber
Attributes:	Enforced
Attributes:	One-To-Many

PSPS and Parts

PS	PS and Parts
PSNumber	1 ∞ PSNumber
Attributes:	Enforced
Attributes:	One-To-Many

Table Indexes

Name	Number of Fields
PartsPS and Parts	1
Clustered:	False
Distinct Count:	5218
Foreign:	True
Ignore Nulls:	False
Name:	PartsPS and Parts
Primary:	False
Required:	False
Unique:	False
Fields:	PartNumber, Ascending
PrimaryKey	3
Clustered:	False
Distinct Count:	14519
Foreign:	False
Ignore Nulls:	False
Name:	PrimaryKey
Primary:	True
Required:	True
Unique:	True
Fields:	PartNumber, Ascending InstPartNumber, Ascending PSNumber, Ascending
PSPS and Parts	1
Clustered:	False
Distinct Count:	77
Foreign:	True
Ignore Nulls:	False
Name:	PSPS and Parts
Primary:	False
Required:	False
Unique:	False

Fields: PSNumber, Ascending

User Permissions

admin

Group Permissions

Admins
Users

60173748-123009

Properties

Date Created: 3/16/99 9:59:39 PM
Last Updated: 3/19/99 7:48:06 PM
Orientation: 0

Def. Updatable: False
OrderByOn: False
RecordCount: 5343

Columns

Name	Type	Size
PartNumber	Text	50
AllowZeroLength:	False	
Attributes:	Variable Length	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	Default	
ColumnWidth:	1695	
Description:	Part Number	
DisplayControl:	Text Box	
Ordinal Position:	1	
Required:	False	
Source Field:	PartNumber	
Source Table:	PSParts	
PartName	Text	50
AllowZeroLength:	False	
Attributes:	Variable Length	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	Default	
ColumnWidth:	1965	
Description:	Part Name	
DisplayControl:	Text Box	
Ordinal Position:	2	
Required:	False	
Source Field:	PartName	
Source Table:	PSParts	
T	Text	50
AllowZeroLength:	False	
Attributes:	Variable Length	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	Default	
ColumnWidth:	450	
Description:	Type	
DisplayControl:	Text Box	
Ordinal Position:	3	
Required:	False	
Source Field:	T	
Source Table:	PSParts	
Width	Number (Double)	8
AllowZeroLength:	False	
Attributes:	Fixed Size	

		Collating Order:	General		
		ColumnHidden:	True		
		ColumnOrder:	Default		
		ColumnWidth:	705		
		Decimal Places:	3		
		Default Value:	0		
		Description:	Width in inch		
		DisplayControl:	Text Box		
		Format:	Fixed		
		Ordinal Position:	4		
		Required:	False		
		Source Field:	Width		
		Source Table:	PSParts		
Length				Number (Double)	8
		AllowZeroLength:	False		
		Attributes:	Fixed Size		
		Collating Order:	General		
		ColumnHidden:	True		
		ColumnOrder:	Default		
		ColumnWidth:	810		
		Decimal Places:	3		
		Default Value:	0		
		Description:	Length in inch		
		DisplayControl:	Text Box		
		Format:	Fixed		
		Ordinal Position:	5		
		Required:	False		
		Source Field:	Length		
		Source Table:	PSParts		
Height				Number (Double)	8
		AllowZeroLength:	False		
		Attributes:	Fixed Size		
		Collating Order:	General		
		ColumnHidden:	True		
		ColumnOrder:	Default		
		ColumnWidth:	765		
		Decimal Places:	3		
		Default Value:	0		
		Description:	Height in inch		
		DisplayControl:	Text Box		
		Format:	Fixed		
		Ordinal Position:	6		
		Required:	False		
		Source Field:	Height		
		Source Table:	PSParts		
Diameter				Number (Double)	8
		AllowZeroLength:	False		
		Attributes:	Fixed Size		
		Collating Order:	General		
		ColumnHidden:	True		
		ColumnOrder:	Default		
		ColumnWidth:	735		
		Decimal Places:	3		
		Default Value:	0		

Description:		Diameter in inch	
DisplayControl:		Text Box	
Format:		Fixed	
Ordinal Position:		7	
Required:		False	
Source Field:		Diameter	
Source Table:		PSParts	
Thickness		Number (Double)	8
AllowZeroLength:		False	
Attributes:		Fixed Size	
Collating Order:		General	
ColumnHidden:		True	
ColumnOrder:		Default	
ColumnWidth:		1080	
Decimal Places:		3	
Default Value:		0	
Description:		Thickness in inch	
DisplayControl:		Text Box	
Format:		Fixed	
Ordinal Position:		8	
Required:		False	
Source Field:		Thickness	
Source Table:		PSParts	
Material		Text	50
AllowZeroLength:		False	
Attributes:		Variable Length	
Collating Order:		General	
ColumnHidden:		False	
ColumnOrder:		Default	
ColumnWidth:		420	
Description:		Material	
DisplayControl:		Text Box	
Ordinal Position:		9	
Required:		False	
Source Field:		Material	
Source Table:		PSParts	
Weight		Number (Double)	8
AllowZeroLength:		False	
Attributes:		Fixed Size	
Collating Order:		General	
ColumnHidden:		True	
ColumnOrder:		Default	
ColumnWidth:		825	
Decimal Places:		3	
Default Value:		0	
Description:		Weight in lb	
DisplayControl:		Text Box	
Format:		Fixed	
Ordinal Position:		10	
Required:		False	
Source Field:		Weight	
Source Table:		PSParts	
PSNum		Text	50

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	AllowZeroLength:	False		
	Attributes:	Variable Length		
	Collating Order:	General		
	ColumnHidden:	False		
	ColumnOrder:	Default		
	ColumnWidth:	870		
	DisplayControl:	Text Box		
	Ordinal Position:	11		
	Required:	False		
	Source Field:	PSNum		
	Source Table:	PSParts		
PSN			Text	50
	AllowZeroLength:	False		
	Attributes:	Variable Length		
	Collating Order:	General		
	ColumnHidden:	False		
	ColumnOrder:	Default		
	ColumnWidth:	855		
	DisplayControl:	Text Box		
	Ordinal Position:	12		
	Required:	False		
	Source Field:	PSN		
	Source Table:	PSParts		
PSN1			Text	50
	AllowZeroLength:	False		
	Attributes:	Variable Length		
	Collating Order:	General		
	ColumnHidden:	False		
	ColumnOrder:	Default		
	ColumnWidth:	Default		
	DisplayControl:	Text Box		
	Ordinal Position:	13		
	Required:	False		
	Source Field:	PSN1		
	Source Table:	PSParts		

Table Indexes

Name	Number of Fields
PrimaryKey	1
Clustered:	False
Distinct Count:	5343
Foreign:	False
Ignore Nulls:	False
Name:	PrimaryKey
Primary:	True
Required:	True
Unique:	True
Fields:	PartNumber, Ascending
PSNum	1
Clustered:	False
Distinct Count:	63
Foreign:	False

C:\WINDOWS\DESKTOP\DPM.mdb
Table: PSParts

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Ignore Nulls:	False
Name:	PSNum
Primary:	False
Required:	False
Unique:	False
Fields:	PSN, Ascending

User Permissions

admin

Group Permissions

Admins
Users

6017318-12308

A-237

Properties

Date Created: 2/24/99 8:28:19 PM
Last Updated: 4/8/99 11:31:18 PM
Orientation: 0

Def. Updatable: False
OrderByOn: False
RecordCount: 2747

Columns

Name	Type	Size
PEng	Number (Long)	4
AllowZeroLength: False		
Attributes: Fixed Size		
Collating Order: General		
ColumnHidden: False		
ColumnOrder: Default		
ColumnWidth: 660		
Decimal Places: 0		
Default Value: 0		
Description: Project Engineer Number		
DisplayControl: Text Box		
Ordinal Position: 1		
Required: False		
Source Field: PEng		
Source Table: Reliability		
REng	Number (Long)	4
AllowZeroLength: False		
Attributes: Fixed Size		
Collating Order: General		
ColumnHidden: False		
ColumnOrder: Default		
ColumnWidth: 675		
Decimal Places: 0		
Default Value: 0		
Description: Reliability Engineer Number		
DisplayControl: Text Box		
Ordinal Position: 2		
Required: False		
Source Field: REng		
Source Table: Reliability		
PartNumber	Text	50
AllowZeroLength: False		
Attributes: Variable Length		
Collating Order: General		
ColumnHidden: False		
ColumnOrder: Default		
ColumnWidth: 1815		
Description: Map Reference Designator		
DisplayControl: Text Box		
Ordinal Position: 3		
Required: False		
Source Field: PartNumber		
Source Table: Reliability		

PartName		Text	50
AllowZeroLength:	False		
Attributes:	Variable Length		
Collating Order:	General		
ColumnHidden:	False		
ColumnOrder:	Default		
ColumnWidth:	2190		
DisplayControl:	Text Box		
Ordinal Position:	4		
Required:	False		
Source Field:	PartName		
Source Table:	Reliability		
Rel		Number (Double)	8
AllowZeroLength:	False		
Attributes:	Fixed Size		
Collating Order:	General		
ColumnHidden:	False		
ColumnOrder:	Default		
ColumnWidth:	990		
Decimal Places:	2		
Default Value:	0		
Description:	Reliability prediction		
DisplayControl:	Text Box		
Format:	Scientific		
Ordinal Position:	5		
Required:	False		
Source Field:	Rel		
Source Table:	Reliability		
RepNumber		Text	50
AllowZeroLength:	False		
Attributes:	Variable Length		
Collating Order:	General		
ColumnHidden:	False		
ColumnOrder:	Default		
ColumnWidth:	Default		
Description:	Reliability Report Number		
DisplayControl:	Text Box		
Ordinal Position:	6		
Required:	False		
Source Field:	RepNumber		
Source Table:	Reliability		
RelNotes		Text	255
AllowZeroLength:	False		
Attributes:	Variable Length		
Collating Order:	General		
ColumnHidden:	False		
ColumnOrder:	Default		
ColumnWidth:	1440		
Description:	Reliability basic consideration		
DisplayControl:	Text Box		
Ordinal Position:	7		
Required:	False		
Source Field:	RelNotes		
Source Table:	Reliability		

Relationships

ManagementReliability

Management		Reliability
Eng	1 ∞ REng	
Attributes:	Enforced	
Attributes:	One-To-Many	

ManagementReliability1

Management		Reliability
Eng	1 ∞ PEng	
Attributes:	Enforced	
Attributes:	One-To-Many	

PartsReliability

Parts		Reliability
PartNumber	1 1 PartNumber	
Attributes:	Unique, Enforced	
Attributes:	One-To-One	

ReportsReliability

Reports		Reliability
ReportNumber	1 ∞ RepNumber	
Attributes:	Enforced	
Attributes:	One-To-Many	

Table Indexes

Name	Number of Fields
ManagementReliability	1
Clustered:	False
Distinct Count:	1
Foreign:	True
Ignore Nulls:	False
Name:	ManagementReliability
Primary:	False
Required:	False

Unique:	False
Fields:	REng, Ascending
ManagementReliability1	1
Clustered:	False
Distinct Count:	5
Foreign:	True
Ignore Nulls:	False
Name:	ManagementReliability1
Primary:	False
Required:	False
Unique:	False
Fields:	PEng, Ascending
PartsReliability	1
Clustered:	False
Distinct Count:	2747
Foreign:	True
Ignore Nulls:	False
Name:	PartsReliability
Primary:	False
Required:	False
Unique:	True
Fields:	PartNumber, Ascending
PEng	1
Clustered:	False
Distinct Count:	5
Foreign:	False
Ignore Nulls:	False
Name:	PEng
Primary:	False
Required:	False
Unique:	False
Fields:	PEng, Ascending
PrimaryKey	1
Clustered:	False
Distinct Count:	2747
Foreign:	False
Ignore Nulls:	False
Name:	PrimaryKey
Primary:	True
Required:	True
Unique:	True
Fields:	PartNumber, Ascending
REng	1
Clustered:	False
Distinct Count:	1
Foreign:	False
Ignore Nulls:	False
Name:	REng
Primary:	False
Required:	False
Unique:	False
Fields:	REng, Ascending
RepNumber	1
Clustered:	False

Distinct Count:	1
Foreign:	False
Ignore Nulls:	False
Name:	RepNumber
Primary:	False
Required:	False
Unique:	False
Fields:	RepNumber, Ascending
ReportsReliability	1
Clustered:	False
Distinct Count:	1
Foreign:	True
Ignore Nulls:	False
Name:	ReportsReliability
Primary:	False
Required:	False
Unique:	False
Fields:	RepNumber, Ascending

User Permissions

admin

Group Permissions

Admins
Users

A-242

Properties

Date Created: 4/26/98 8:22:08 PM
Last Updated: 6/29/99 11:29:42 PM
OrderByOn: False
RecordCount: 281

Def. Updatable: False
OrderBy: Reports.WorkOrder
Orientation: 0

Columns

Name	Type	Size
PEng	Number (Long)	4
AllowZeroLength:	False	
Attributes:	Fixed Size	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	1	
ColumnWidth:	645	
Decimal Places:	Auto	
Default Value:	0	
Description:	Project Engineer/Project Manager	
DisplayControl:	Text Box	
Ordinal Position:	1	
Required:	True	
Source Field:	PEng	
Source Table:	Reports	
Eng	Number (Long)	4
AllowZeroLength:	False	
Attributes:	Fixed Size	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	Default	
ColumnWidth:	510	
Decimal Places:	Auto	
Default Value:	0	
Description:	Engineer responsible for the activities	
DisplayControl:	Text Box	
Ordinal Position:	2	
Required:	False	
Source Field:	Eng	
Source Table:	Reports	
ReportNumber	Text	50
AllowZeroLength:	False	
Attributes:	Variable Length	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	Default	
ColumnWidth:	Default	
Description:	Report Number	
DisplayControl:	Text Box	
Ordinal Position:	3	
Required:	False	
Source Field:	ReportNumber	

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Source Table:		Reports	
ReportName		Text	255
AllowZeroLength:	False		
Attributes:	Variable Length		
Collating Order:	General		
ColumnHidden:	False		
ColumnOrder:	Default		
ColumnWidth:	5085		
Description:	Report Name		
DisplayControl:	Text Box		
Ordinal Position:	4		
Required:	False		
Source Field:	ReportName		
Source Table:	Reports		
T		Text	50
AllowZeroLength:	False		
Attributes:	Variable Length		
Collating Order:	General		
ColumnHidden:	False		
ColumnOrder:	Default		
ColumnWidth:	420		
Description:	Report Type (Vendor, Control, Dimensional, Undimensional)		
DisplayControl:	Text Box		
Ordinal Position:	5		
Required:	False		
Source Field:	T		
Source Table:	Reports		
Sh		Number (Long)	4
AllowZeroLength:	False		
Attributes:	Fixed Size		
Collating Order:	General		
ColumnHidden:	False		
ColumnOrder:	Default		
ColumnWidth:	405		
Decimal Places:	Auto		
Default Value:	0		
Description:	Sheets Number		
DisplayControl:	Text Box		
Ordinal Position:	6		
Required:	False		
Source Field:	Sh		
Source Table:	Reports		
Form		Text	50
AllowZeroLength:	False		
Attributes:	Variable Length		
Collating Order:	General		
ColumnHidden:	False		
ColumnOrder:	Default		
ColumnWidth:	645		
Description:	Drawing Format		
DisplayControl:	Text Box		
Ordinal Position:	7		
Required:	False		

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	Source Field: Source Table:	Form Reports		
Iss	AllowZeroLength: Attributes: Collating Order: ColumnHidden: ColumnOrder: ColumnWidth: Description: DisplayControl: Ordinal Position: Required: Source Field: Source Table:	False Variable Length General False Default 390 Revision Text Box 8 False Iss Reports	Text	50
Dept	AllowZeroLength: Attributes: Collating Order: ColumnHidden: ColumnOrder: ColumnWidth: Decimal Places: Default Value: Description: DisplayControl: Ordinal Position: Required: Source Field: Source Table:	False Fixed Size General False Default 585 Auto 0 Department Number Text Box 9 False Dept Reports	Number (Long)	4
IDesigner	AllowZeroLength: Attributes: Collating Order: ColumnHidden: ColumnOrder: ColumnWidth: Decimal Places: Default Value: Description: DisplayControl: Ordinal Position: Required: Source Field: Source Table:	False Fixed Size General False Default 990 Auto 0 Identification Number Text Box 10 False IDesigner Reports	Number (Long)	4
Date	AllowZeroLength: Attributes: Collating Order: ColumnHidden: ColumnOrder: ColumnWidth: Description:	False Fixed Size General False Default 1065 Date	Date/Time	8

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	Format:	Medium Date	
	Ordinal Position:	11	
	Required:	False	
	Source Field:	Date	
	Source Table:	Reports	
Update		Date/Time	8
	AllowZeroLength:	False	
	Attributes:	Fixed Size	
	Collating Order:	General	
	ColumnHidden:	False	
	ColumnOrder:	Default	
	ColumnWidth:	1065	
	Description:	Update	
	Format:	Medium Date	
	Ordinal Position:	12	
	Required:	False	
	Source Field:	Update	
	Source Table:	Reports	
WBS		Number (Long)	4
	AllowZeroLength:	False	
	Attributes:	Fixed Size	
	Collating Order:	General	
	ColumnHidden:	False	
	ColumnOrder:	Default	
	ColumnWidth:	675	
	Decimal Places:	Auto	
	Default Value:	0	
	Description:	Work Breaking Structure	
	DisplayControl:	Text Box	
	Ordinal Position:	13	
	Required:	False	
	Source Field:	WBS	
	Source Table:	Reports	
WorkOrder		Number (Long)	4
	AllowZeroLength:	False	
	Attributes:	Fixed Size	
	Collating Order:	General	
	ColumnHidden:	False	
	ColumnOrder:	Default	
	ColumnWidth:	1185	
	Decimal Places:	Auto	
	Default Value:	0	
	Description:	Work Order	
	DisplayControl:	Text Box	
	Ordinal Position:	14	
	Required:	False	
	Source Field:	WorkOrder	
	Source Table:	Reports	
Time		Number (Double)	8
	AllowZeroLength:	False	
	Attributes:	Fixed Size	
	Collating Order:	General	
	ColumnHidden:	False	

ColumnOrder:	Default
ColumnWidth:	630
Decimal Places:	1
Default Value:	0
Description:	Time in hours
DisplayControl:	Text Box
Ordinal Position:	15
Required:	False
Source Field:	Time
Source Table:	Reports

Relationships

ReportsAMO data

Reports	AMO data
ReportNumber	1 ∞ AMORepNumber
Attributes:	Enforced
Attributes:	One-To-Many

ReportsCritical parts

Reports	Critical parts
ReportNumber	1 ∞ CPReportNumber
Attributes:	One-To-Many
Attributes:	Enforced

ReportsDesign criteria

Reports	Design criteria
ReportNumber	1 ∞ ReportNumber
Attributes:	One-To-Many
Attributes:	Enforced

ReportsDesign-to-cost analysis

Reports	Design-to-cost analysis
ReportNumber	1 ∞ ReportNumber
Attributes:	Enforced
Attributes:	One-To-Many

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ReportsDoor

Reports	Door
ReportNumber	1 ∞ ReportNumber

Attributes:	One-To-Many
Attributes:	Enforced

ReportsFailure parts

Reports	Failure parts
ReportNumber	1 ∞ FailReportNumber

Attributes:	One-To-Many
Attributes:	Enforced

ReportsGrounding

Reports	Grounding
ReportNumber	1 ∞ GrRepNumber

Attributes:	One-To-Many
Attributes:	Enforced

ReportsLLI

Reports	LLI
ReportNumber	1 ∞ ReportNumber

Attributes:	One-To-Many
Attributes:	Enforced

ReportsLRU

Reports	LRU
ReportNumber	1 ∞ ReportNumber

Attributes:	Enforced
Attributes:	One-To-Many

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60473748123000

ReportsMaintenance

Reports	Maintenance
ReportNumber	1 ∞ RepNumber
Attributes:	One-To-Many
Attributes:	Enforced

ReportsMRD

Reports	MRD
ReportNumber	1 ∞ MapSysReport
Attributes:	One-To-Many
Attributes:	Enforced

ReportsReliability

Reports	Reliability
ReportNumber	1 ∞ RepNumber
Attributes:	Enforced
Attributes:	One-To-Many

ReportsSurvivability Code

Reports	Survivability Code
ReportNumber	1 ∞ ReportNumber
Attributes:	One-To-Many
Attributes:	Enforced

ReportsVibration

Reports	Vibration
ReportNumber	1 ∞ ReportNumber
Attributes:	One-To-Many
Attributes:	Enforced

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ReportsWeight

Reports	Weight
ReportNumber	1 ∞ WeightRep

Attributes:	One-To-Many
Attributes:	Enforced

WBSReports

WBS	Reports
WBS	1 ∞ WBS

Attributes:	Enforced
Attributes:	One-To-Many

Table Indexes

Name	Number of Fields
Eng	1
Clustered:	False
Distinct Count:	131
Foreign:	False
Ignore Nulls:	False
Name:	Eng
Primary:	False
Required:	False
Unique:	False
Fields:	Eng, Ascending
ID	1
Clustered:	False
Distinct Count:	159
Foreign:	False
Ignore Nulls:	False
Name:	ID
Primary:	False
Required:	False
Unique:	False
Fields:	IDesigner, Ascending
PEng	1
Clustered:	False
Distinct Count:	11
Foreign:	False
Ignore Nulls:	False
Name:	PEng
Primary:	False
Required:	False
Unique:	False
Fields:	PEng, Ascending

PrimaryKey	1
Clustered:	False
Distinct Count:	281
Foreign:	False
Ignore Nulls:	False
Name:	PrimaryKey
Primary:	True
Required:	True
Unique:	True
Fields:	ReportNumber, Ascending

WBS	1
Clustered:	False
Distinct Count:	172
Foreign:	False
Ignore Nulls:	False
Name:	WBS
Primary:	False
Required:	False
Unique:	False
Fields:	WBS, Ascending

WBSReports	1
Clustered:	False
Distinct Count:	172
Foreign:	True
Ignore Nulls:	False
Name:	WBSReports
Primary:	False
Required:	False
Unique:	False
Fields:	WBS, Ascending

User Permissions

admin

Group Permissions

Admins
Users

Properties

Date Created: 4/27/98 8:33:53 PM
Last Updated: 2/1/99 10:47:52 PM
Orientation: 0

Def. Updatable: False
OrderByOn: False
RecordCount: 110

Columns

Name	Type	Size
Company	Text	50
AllowZeroLength: False		
Attributes: Variable Length		
Collating Order: General		
ColumnHidden: False		
ColumnOrder: 1		
ColumnWidth: 1830		
Description: Company		
DisplayControl: Text Box		
Ordinal Position: 0		
Required: False		
Source Field: Company		
Source Table: Supplier		
Country	Text	50
AllowZeroLength: False		
Attributes: Variable Length		
Collating Order: General		
ColumnHidden: False		
ColumnOrder: Default		
ColumnWidth: Default		
Description: Country		
DisplayControl: Text Box		
Ordinal Position: 1		
Required: False		
Source Field: Country		
Source Table: Supplier		
Address	Text	50
AllowZeroLength: False		
Attributes: Variable Length		
Collating Order: General		
ColumnHidden: False		
ColumnOrder: Default		
ColumnWidth: Default		
Description: Address		
DisplayControl: Text Box		
Ordinal Position: 2		
Required: False		
Source Field: Address		
Source Table: Supplier		
Phone	Text	50
AllowZeroLength: False		
Attributes: Variable Length		

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Collating Order:	General
ColumnHidden:	False
ColumnOrder:	Default
ColumnWidth:	Default
Description:	Phone
DisplayControl:	Text Box
Ordinal Position:	3
Required:	False
Source Field:	Phone
Source Table:	Supplier

Fax

AllowZeroLength:	False
Attributes:	Variable Length
Collating Order:	General
ColumnHidden:	False
ColumnOrder:	Default
ColumnWidth:	Default
Description:	Fax
DisplayControl:	Text Box
Ordinal Position:	4
Required:	False
Source Field:	Fax
Source Table:	Supplier

Text

50

Relationships

SupplierComponents

Supplier		Components
Company	1 ∞	Supplier
Attributes:		Enforced
Attributes:		One-To-Many

SupplierProcurement

Supplier		Procurement
Company	1 ∞	Supplier
Attributes:		Enforced
Attributes:		One-To-Many

Table Indexes

Name	Number of Fields
PrimaryKey	1
Clustered:	False
Distinct Count:	110
Foreign:	False
Ignore Nulls:	False

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Name:	PrimaryKey
Primary:	True
Required:	True
Unique:	True
Fields:	Company, Ascending

admin

Admins
Users

[illegible]

Properties

Date Created: 6/6/99 6:05:29 PM
Last Updated: 6/29/99 11:02:15 PM
Orientation: 0

Def. Updatable: False
OrderByOn: True
RecordCount: 33

Columns

Name	Type	Size
SCode	Text	50
AllowZeroLength:	False	
Attributes:	Variable Length	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	Default	
ColumnWidth:	780	
Description:	Survivability Group Code Designator	
DisplayControl:	Text Box	
Ordinal Position:	1	
Required:	False	
Source Field:	SCode	
Source Table:	Survivability Code	
Description	Text	255
AllowZeroLength:	False	
Attributes:	Variable Length	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	Default	
ColumnWidth:	3990	
Description:	Map Reference Designator	
DisplayControl:	Text Box	
Ordinal Position:	2	
Required:	False	
Source Field:	Description	
Source Table:	Survivability Code	
System	Text	50
AllowZeroLength:	False	
Attributes:	Variable Length	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	Default	
ColumnWidth:	960	
Description:	System: Critical, Essential	
DisplayControl:	Text Box	
Ordinal Position:	3	
Required:	False	
Source Field:	System	
Source Table:	Survivability Code	
ReportNumber	Text	50
AllowZeroLength:	False	
Attributes:	Variable Length	

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Collating Order:	General
ColumnHidden:	False
ColumnOrder:	Default
ColumnWidth:	Default
Description:	Report Number
DisplayControl:	Text Box
Ordinal Position:	4
Required:	False
Source Field:	ReportNumber
Source Table:	Survivability Code

Remarks

Text

255

AllowZeroLength:	False
Attributes:	Variable Length
Collating Order:	General
ColumnHidden:	False
ColumnOrder:	Default
ColumnWidth:	6150
Description:	Remarks
DisplayControl:	Text Box
Ordinal Position:	5
Required:	False
Source Field:	Remarks
Source Table:	Survivability Code

Relationships

ReportsSurvivability Code

Reports		Survivability Code
ReportNumber	1 ∞	ReportNumber
Attributes:		Enforced
Attributes:		One-To-Many

Survivability CodeMRD

Survivability Code		MRD
SCode	1 ∞	SCode
Attributes:		Enforced
Attributes:		One-To-Many

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Survivability CodeSurvivability distance

Survivability Code	Survivability distance
SCode	1 ∞ S1
Attributes:	Enforced
Attributes:	One-To-Many

Survivability CodeSurvivability distance1

Survivability Code	Survivability distance
SCode	1 ∞ S2
Attributes:	Enforced
Attributes:	One-To-Many

Table Indexes

Name	Number of Fields
PrimaryKey	1
Clustered:	False
Distinct Count:	33
Foreign:	False
Ignore Nulls:	False
Name:	PrimaryKey
Primary:	True
Required:	True
Unique:	True
Fields:	SCode, Ascending
ReportNumber	1
Clustered:	False
Distinct Count:	1
Foreign:	False
Ignore Nulls:	False
Name:	ReportNumber
Primary:	False
Required:	False
Unique:	False
Fields:	ReportNumber, Ascending
ReportsSurvivability Code	1
Clustered:	False
Distinct Count:	1
Foreign:	True
Ignore Nulls:	False
Name:	ReportsSurvivability Code
Primary:	False
Required:	False
Unique:	False
Fields:	ReportNumber, Ascending

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User Permissions

admin

Group Permissions

Admins
Users

GROUP = GROUPS

Properties

Date Created: 6/7/99 10:34:00 PM
Last Updated: 6/11/99 10:52:09 AM
Orientation: 0

Def. Updatable: False
OrderByOn: True
RecordCount: 527

Columns

Name	Type	Size
S1	Text	50
AllowZeroLength:	False	
Attributes:	Variable Length	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	Default	
ColumnWidth:	810	
Description:	Survivability Code of part 1	
DisplayControl:	Text Box	
Ordinal Position:	1	
Required:	False	
Source Field:	S1	
Source Table:	Survivability distance	
S2	Text	50
AllowZeroLength:	False	
Attributes:	Variable Length	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	Default	
ColumnWidth:	720	
Description:	Survivability Code of part 2	
DisplayControl:	Text Box	
Ordinal Position:	2	
Required:	False	
Source Field:	S2	
Source Table:	Survivability distance	
Distance	Number (Double)	8
AllowZeroLength:	False	
Attributes:	Fixed Size	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	Default	
ColumnWidth:	960	
Decimal Places:	2	
Default Value:	0.25	
Description:	Minimum distance between parts in inch	
DisplayControl:	Text Box	
Format:	Fixed	
Ordinal Position:	3	
Required:	False	
Source Field:	Distance	
Source Table:	Survivability distance	

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Relationships

Survivability CodeSurvivability distance

Survivability Code	Survivability distance
SCode	1 ∞ S1
Attributes:	Enforced
Attributes:	One-To-Many

Survivability CodeSurvivability distance1

Survivability Code	Survivability distance
SCode	1 ∞ S2
Attributes:	Enforced
Attributes:	One-To-Many

Table Indexes

Name	Number of Fields
PrimaryKey	2
Clustered:	False
Distinct Count:	527
Foreign:	False
Ignore Nulls:	False
Name:	PrimaryKey
Primary:	True
Required:	True
Unique:	True
Fields:	S1, Ascending S2, Ascending
Survivability CodeSurvivability distance	1
Clustered:	False
Distinct Count:	32
Foreign:	True
Ignore Nulls:	False
Name:	Survivability CodeSurvivability distance
Primary:	False
Required:	False
Unique:	False
Fields:	S1, Ascending
Survivability CodeSurvivability distance1	1
Clustered:	False
Distinct Count:	32
Foreign:	True
Ignore Nulls:	False
Name:	Survivability CodeSurvivability distance1
Primary:	False
Required:	False

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False
S2, Ascending

admin

Admins
Users

[illegible]

Properties

Date Created: 4/27/98 8:48:47 PM
Last Updated: 2/6/99 12:10:47 AM
Orientation: 0

Def. Updatable: False
OrderByOn: False
RecordCount: 516

Columns

Name	Type	Size
PartNumber AllowZeroLength: False Attributes: Variable Length Collating Order: General ColumnHidden: False ColumnOrder: 1 ColumnWidth: 1695 Description: Part Number DisplayControl: Text Box Ordinal Position: 1 Required: False Source Field: PartNumber Source Table: Technical data	Text	50
TrayPN AllowZeroLength: False Attributes: Variable Length Collating Order: General ColumnHidden: False ColumnOrder: Default ColumnWidth: 1695 Description: Tray Part Number DisplayControl: Text Box Ordinal Position: 2 Required: False Source Field: TrayPN Source Table: Technical data	Text	50
Capacity AllowZeroLength: False Attributes: Fixed Size Collating Order: General ColumnHidden: False ColumnOrder: Default ColumnWidth: 975 Decimal Places: 3 Default Value: 0 Description: Capacity in liters DisplayControl: Text Box Ordinal Position: 3 Required: False Source Field: Capacity Source Table: Technical data	Number (Double)	8
Power	Number (Double)	8

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AllowZeroLength: False
Attributes: Fixed Size
Collating Order: General
ColumnHidden: False
ColumnOrder: Default
ColumnWidth: 765
Decimal Places: 3
Default Value: 0
Description: Power in wt
DisplayControl: Text Box
Ordinal Position: 4
Required: False
Source Field: Power
Source Table: Technical data

CoolType Text 50

AllowZeroLength: False
Attributes: Variable Length
Collating Order: General
ColumnHidden: False
ColumnOrder: Default
ColumnWidth: 1950
Description: Cooling type
DisplayControl: Text Box
Ordinal Position: 5
Required: False
Source Field: CoolType
Source Table: Technical data

HeatDis Number (Double) 8

AllowZeroLength: False
Attributes: Fixed Size
Collating Order: General
ColumnHidden: False
ColumnOrder: Default
ColumnWidth: 870
Decimal Places: 3
Default Value: 0
Description: Heat dissipation in wt
DisplayControl: Text Box
Ordinal Position: 6
Required: False
Source Field: HeatDis
Source Table: Technical data

Attachment Text 50

AllowZeroLength: False
Attributes: Variable Length
Collating Order: General
ColumnHidden: False
ColumnOrder: Default
ColumnWidth: Default
Description: Attachment
DisplayControl: Text Box
Ordinal Position: 7
Required: False
Source Field: Attachment

Source Table:	Technical data	
DataNotes	Text	50
AllowZeroLength:	False	
Attributes:	Variable Length	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	Default	
ColumnWidth:	Default	
Description:	Units technical data notes	
DisplayControl:	Text Box	
Ordinal Position:	8	
Required:	False	
Source Field:	DataNotes	
Source Table:	Technical data	

Relationships

PartsTechnical data	Parts	Technical data
PartNumber	1	1 PartNumber
Attributes:		Unique, Enforced
Attributes:		One-To-One

Table Indexes

Name	Number of Fields
PartsTechnical data	1
Clustered:	False
Distinct Count:	516
Foreign:	True
Ignore Nulls:	False
Name:	PartsTechnical data
Primary:	False
Required:	False
Unique:	True
Fields:	PartNumber, Ascending
PrimaryKey	1
Clustered:	False
Distinct Count:	516
Foreign:	False
Ignore Nulls:	False
Name:	PrimaryKey
Primary:	True
Required:	True
Unique:	True
Fields:	PartNumber, Ascending

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Group Permissions

Admins
Users

Properties

Date Created: 4/26/98 10:26:43 PM
Last Updated: 4/24/99 11:24:07 PM
OrderByOn: False
RecordCount: 2519

Def. Updatable:
OrderBy:
Orientation:

False
Technology.ReportNumber
0

Columns

Name	Type	Size
PartNumber	Text	50
AllowZeroLength:	False	
Attributes:	Variable Length	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	Default	
ColumnWidth:	1695	
Description:	Part Number	
DisplayControl:	Text Box	
Ordinal Position:	1	
Required:	False	
Source Field:	PartNumber	
Source Table:	Technology	
Technology	Text	50
AllowZeroLength:	False	
Attributes:	Variable Length	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	Default	
ColumnWidth:	1485	
Description:	Technology	
DisplayControl:	Text Box	
Ordinal Position:	2	
Required:	False	
Source Field:	Technology	
Source Table:	Technology	
CheMill	Yes/No	1
AllowZeroLength:	False	
Attributes:	Fixed Size	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	Default	
ColumnWidth:	870	
Description:	CheMill	
DisplayControl:	106	
Format:	Yes/No	
Ordinal Position:	3	
Required:	False	
Source Field:	CheMill	
Source Table:	Technology	
HeaTr	Yes/No	1

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AllowZeroLength:	False
Attributes:	Fixed Size
Collating Order:	General
ColumnHidden:	False
ColumnOrder:	Default
ColumnWidth:	720
Description:	Heat Treatment
DisplayControl:	106
Format:	Yes/No
Ordinal Position:	4
Required:	False
Source Field:	HeaTr
Source Table:	Technology

Shot/Peen	Yes/No	1
-----------	--------	---

AllowZeroLength:	False
Attributes:	Fixed Size
Collating Order:	General
ColumnHidden:	False
ColumnOrder:	Default
ColumnWidth:	1080
Description:	Shot Peening
DisplayControl:	106
Format:	Yes/No
Ordinal Position:	5
Required:	False
Source Field:	ShotPeen
Source Table:	Technology

LI	Yes/No	1
----	--------	---

AllowZeroLength:	False
Attributes:	Fixed Size
Collating Order:	General
ColumnHidden:	False
ColumnOrder:	Default
ColumnWidth:	Default
Description:	Long Lead Item
DisplayControl:	106
Format:	Yes/No
Ordinal Position:	6
Required:	False
Source Field:	LLI
Source Table:	Technology

Pretreatment	Text	50
--------------	------	----

AllowZeroLength:	False
Attributes:	Variable Length
Collating Order:	General
ColumnHidden:	False
ColumnOrder:	Default
ColumnWidth:	2025
Description:	Pretreatment
DisplayControl:	Text Box
Ordinal Position:	7
Required:	False
Source Field:	Pretreatment
Source Table:	Technology

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Finish	AllowZeroLength:	False	Text	50
	Attributes:	Variable Length		
	Collating Order:	General		
	ColumnHidden:	False		
	ColumnOrder:	Default		
	ColumnWidth:	2265		
	Description:	Finish		
	DisplayControl:	Text Box		
	Ordinal Position:	8		
	Required:	False		
	Source Field:	Finish		
	Source Table:	Technology		

TechNotes	AllowZeroLength:	False	Text	50
	Attributes:	Variable Length		
	Collating Order:	General		
	ColumnHidden:	False		
	ColumnOrder:	Default		
	ColumnWidth:	Default		
	Description:	Technology notes		
	DisplayControl:	Text Box		
	Ordinal Position:	9		
	Required:	False		
	Source Field:	TechNotes		
	Source Table:	Technology		

ReportNumber	AllowZeroLength:	False	Text	50
	Attributes:	Variable Length		
	Collating Order:	General		
	ColumnHidden:	False		
	ColumnOrder:	Default		
	ColumnWidth:	Default		
	Description:	Report Number		
	DisplayControl:	Text Box		
	Ordinal Position:	10		
	Required:	False		
	Source Field:	ReportNumber		
	Source Table:	Technology		

Relationships

PartsTechnology

	Parts	Technology
PartNumber	1	1 PartNumber
Attributes:		Unique, Enforced
Attributes:		One-To-One

Table Indexes

Name	Number of Fields
PartsTechnology	1
Clustered:	False
Distinct Count:	2519
Foreign:	True
Ignore Nulls:	False
Name:	PartsTechnology
Primary:	False
Required:	False
Unique:	True
Fields:	PartNumber, Ascending
PrimaryKey	1
Clustered:	False
Distinct Count:	2519
Foreign:	False
Ignore Nulls:	False
Name:	PrimaryKey
Primary:	True
Required:	True
Unique:	True
Fields:	PartNumber, Ascending
ReportNumber	1
Clustered:	False
Distinct Count:	1
Foreign:	False
Ignore Nulls:	False
Name:	ReportNumber
Primary:	False
Required:	False
Unique:	False
Fields:	ReportNumber, Ascending

User Permissions

admin

Group Permissions

Admins
Users

60172718:123099

Properties

Date Created:	3/15/99 8:07:04 PM	Def. Updatable:	False
Last Updated:	3/19/99 11:55:17 PM	OrderByOn:	True
Orientation:	0	RecordCount:	207
RowHeight:	Default		

Columns

Name	Type	Size
TShopNumber	Text	50
AllowZeroLength:	False	
Attributes:	Variable Length	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	Default	
ColumnWidth:	795	
DisplayControl:	Text Box	
Ordinal Position:	1	
Required:	False	
Source Field:	TShopNumber	
Source Table:	Tool shop	
ToolFunction	Text	50
AllowZeroLength:	False	
Attributes:	Variable Length	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	Default	
ColumnWidth:	1785	
DisplayControl:	Text Box	
Ordinal Position:	2	
Required:	False	
Source Field:	ToolFunction	
Source Table:	Tool shop	
ToolName	Text	50
AllowZeroLength:	False	
Attributes:	Variable Length	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	Default	
ColumnWidth:	3450	
DisplayControl:	Text Box	
Ordinal Position:	3	
Required:	False	
Source Field:	ToolName	
Source Table:	Tool shop	

Relationships

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Tool shop	Tshop and parts
TShopNumber	1 ∞ TShopNumber

Table Indexes

User Permissions

Group Permissions

Admins
Users

Properties

Date Created: 4/26/98 9:04:37 PM
Last Updated: 7/5/99 6:41:43 PM
Orientation: 0

Def. Updatable: False
OrderByOn: False
RecordCount: 957

Columns

Name	Type	Size
ToolPartN	Text	50
AllowZeroLength:	False	
Attributes:	Variable Length	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	Default	
ColumnWidth:	1695	
Description:	Tool Part Number	
DisplayControl:	Text Box	
Ordinal Position:	1	
Required:	False	
Source Field:	ToolPartN	
Source Table:	Tools	
ToolType	Text	50
AllowZeroLength:	False	
Attributes:	Variable Length	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	Default	
ColumnWidth:	1410	
Description:	Tool Type	
DisplayControl:	Text Box	
Ordinal Position:	2	
Required:	False	
Source Field:	ToolType	
Source Table:	Tools	
ToolNotes	Text	50
AllowZeroLength:	False	
Attributes:	Variable Length	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	Default	
ColumnWidth:	Default	
Description:	Tool Notes	
DisplayControl:	Text Box	
Ordinal Position:	3	
Required:	False	
Source Field:	ToolNotes	
Source Table:	Tools	
ReportNumber	Text	50
AllowZeroLength:	False	
Attributes:	Variable Length	

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Collating Order:	General
ColumnHidden:	False
ColumnOrder:	Default
ColumnWidth:	Default
Description:	ReportNumber
DisplayControl:	Text Box
Ordinal Position:	4
Required:	False
Source Field:	ReportNumber
Source Table:	Tools

Relationships

ToolsTools & parts

Tools	Tools and parts
ToolPartN	1 ∞ ToolPartN
Attributes:	Enforced
Attributes:	One-To-Many

Table Indexes

Name	Number of Fields
PrimaryKey	1
Clustered:	False
Distinct Count:	957
Foreign:	False
Ignore Nulls:	False
Name:	PrimaryKey
Primary:	True
Required:	True
Unique:	True
Fields:	ToolPartN, Ascending
ReportNumber	1
Clustered:	False
Distinct Count:	1
Foreign:	False
Ignore Nulls:	False
Name:	ReportNumber
Primary:	False
Required:	False
Unique:	False
Fields:	ReportNumber, Ascending

User Permissions

admin

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Group Permissions

Admins
Users

[illegible]

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Properties

Date Created:	4/26/98 9:00:30 PM	Def. Updatable:	False
Last Updated:	10/9/98 8:48:38 PM	OrderByOn:	False
Orientation:	0	RecordCount:	1115

Columns

Name	Type	Size
ToolPartN	Text	50
AllowZeroLength:	False	
Attributes:	Variable Length	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	1	
ColumnWidth:	1695	
Description:	Tool Part Number	
DisplayControl:	Text Box	
Ordinal Position:	1	
Required:	False	
Source Field:	ToolPartN	
Source Table:	Tools and parts	
PartNumber	Text	50
AllowZeroLength:	False	
Attributes:	Variable Length	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	Default	
ColumnWidth:	1695	
Description:	Part Number	
DisplayControl:	Text Box	
Ordinal Position:	2	
Required:	False	
Source Field:	PartNumber	
Source Table:	Tools and parts	

Relationships

PartsTools & parts

Parts	Tools and parts
PartNumber	1 ∞ PartNumber
Attributes:	Enforced
Attributes:	One-To-Many

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PartsTools & parts1

Parts	Tools and parts
PartNumber	1 ∞ ToolPartN
Attributes:	Enforced
Attributes:	One-To-Many

ToolsTools & parts

Tools	Tools and parts
ToolPartN	1 ∞ ToolPartN
Attributes:	Enforced
Attributes:	One-To-Many

Table Indexes

Name	Number of Fields
PartsTools & parts	1
Clustered:	False
Distinct Count:	1115
Foreign:	True
Ignore Nulls:	False
Name:	PartsTools & parts
Primary:	False
Required:	False
Unique:	False
Fields:	PartNumber, Ascending
PartsTools & parts1	1
Clustered:	False
Distinct Count:	957
Foreign:	True
Ignore Nulls:	False
Name:	PartsTools & parts1
Primary:	False
Required:	False
Unique:	False
Fields:	ToolPartN, Ascending
PrimaryKey	2
Clustered:	False
Distinct Count:	1115
Foreign:	False
Ignore Nulls:	False
Name:	PrimaryKey
Primary:	True
Required:	True
Unique:	True

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C:\WINDOWS\DESKTOP\DPM.mdb
Table: Tools and parts

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Fields:	ToolPartN, Ascending
	PartNumber, Ascending
ToolsTools & parts	1
Clustered:	False
Distinct Count:	957
Foreign:	True
Ignore Nulls:	False
Name:	ToolsTools & parts
Primary:	False
Required:	False
Unique:	False
Fields:	ToolPartN, Ascending

User Permissions

admin

Group Permissions

Admins
Users

50172718:123000

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Properties

Date Created: 3/16/99 10:00:37 PM
Last Updated: 3/19/99 11:34:08 PM
OrderByOn: False
RecordCount: 5343

Def. Updatable: False
OrderBy: TParts.T1
Orientation: 0

Columns

Name	Type	Size
PartNumber	Text	50
AllowZeroLength:	False	
Attributes:	Variable Length	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	Default	
ColumnWidth:	1695	
Description:	Part Number	
DisplayControl:	Text Box	
Ordinal Position:	1	
Required:	False	
Source Field:	PartNumber	
Source Table:	TParts	
PartName	Text	50
AllowZeroLength:	False	
Attributes:	Variable Length	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	Default	
ColumnWidth:	2025	
Description:	Part Name	
DisplayControl:	Text Box	
Ordinal Position:	2	
Required:	False	
Source Field:	PartName	
Source Table:	TParts	
T	Text	50
AllowZeroLength:	False	
Attributes:	Variable Length	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	Default	
ColumnWidth:	450	
Description:	Type	
DisplayControl:	Text Box	
Ordinal Position:	3	
Required:	False	
Source Field:	T	
Source Table:	TParts	
Width	Number (Double)	8
AllowZeroLength:	False	

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Attributes: Fixed Size
Collating Order: General
ColumnHidden: True
ColumnOrder: Default
ColumnWidth: 705
Decimal Places: 3
Default Value: 0
Description: Width in inch
DisplayControl: Text Box
Format: Fixed
Ordinal Position: 4
Required: False
Source Field: Width
Source Table: TParts

Length Number (Double) 8

AllowZeroLength: False
Attributes: Fixed Size
Collating Order: General
ColumnHidden: True
ColumnOrder: Default
ColumnWidth: 810
Decimal Places: 3
Default Value: 0
Description: Length in inch
DisplayControl: Text Box
Format: Fixed
Ordinal Position: 5
Required: False
Source Field: Length
Source Table: TParts

Height Number (Double) 8

AllowZeroLength: False
Attributes: Fixed Size
Collating Order: General
ColumnHidden: True
ColumnOrder: Default
ColumnWidth: 765
Decimal Places: 3
Default Value: 0
Description: Height in inch
DisplayControl: Text Box
Format: Fixed
Ordinal Position: 6
Required: False
Source Field: Height
Source Table: TParts

Diameter Number (Double) 8

AllowZeroLength: False
Attributes: Fixed Size
Collating Order: General
ColumnHidden: True
ColumnOrder: Default
ColumnWidth: 735
Decimal Places: 3

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Default Value: 0
Description: Diameter in inch
DisplayControl: Text Box
Format: Fixed
Ordinal Position: 7
Required: False
Source Field: Diameter
Source Table: TParts

Thickness Number (Double) 8

AllowZeroLength: False
Attributes: Fixed Size
Collating Order: General
ColumnHidden: True
ColumnOrder: Default
ColumnWidth: 1080
Decimal Places: 3
Default Value: 0
Description: Thickness in inch
DisplayControl: Text Box
Format: Fixed
Ordinal Position: 8
Required: False
Source Field: Thickness
Source Table: TParts

Material Text 50

AllowZeroLength: False
Attributes: Variable Length
Collating Order: General
ColumnHidden: False
ColumnOrder: Default
ColumnWidth: 900
Description: Material
DisplayControl: Text Box
Ordinal Position: 9
Required: False
Source Field: Material
Source Table: TParts

Weight Number (Double) 8

AllowZeroLength: False
Attributes: Fixed Size
Collating Order: General
ColumnHidden: True
ColumnOrder: Default
ColumnWidth: 945
Decimal Places: 3
Default Value: 0
Description: Weight in lb
DisplayControl: Text Box
Format: Fixed
Ordinal Position: 10
Required: False
Source Field: Weight
Source Table: TParts

C:\WINDOWS\DESKTOP\DP.Mdb
Table: TParts

T1

AllowZeroLength:
Attributes:
Collating Order:
ColumnHidden:
ColumnOrder:
ColumnWidth:
DisplayControl:
Ordinal Position:
Required:
Source Field:
Source Table:

False
Variable Length
General
False
Default
990
Text Box
11
False
T1
TParts

Text

50

T2

AllowZeroLength:
Attributes:
Collating Order:
ColumnHidden:
ColumnOrder:
ColumnWidth:
DisplayControl:
Ordinal Position:
Required:
Source Field:
Source Table:

False
Variable Length
General
False
Default
870
Text Box
12
False
T2
TParts

Text

50

T3

AllowZeroLength:
Attributes:
Collating Order:
ColumnHidden:
ColumnOrder:
ColumnWidth:
DisplayControl:
Ordinal Position:
Required:
Source Field:
Source Table:

False
Variable Length
General
False
Default
1200
Text Box
13
False
T3
TParts

Text

50

Table Indexes

Name

PrimaryKey

Clustered:
Distinct Count:
Foreign:
Ignore Nulls:
Name:
Primary:
Required:
Unique:
Fields:

Number of Fields

1

False
5343
False
False
PrimaryKey
True
True
True
PartNumber, Ascending

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User Permissions

admin

Group Permissions

Admins
Users

Properties

Date Created:	3/19/99 11:28:11 PM	Def. Updatable:	False
Last Updated:	3/20/99 12:13:53 AM	OrderByOn:	False
Orientation:	0	RecordCount:	19733

Columns

Name	Type	Size
PartNumber	Text	50
AllowZeroLength:	False	
Attributes:	Variable Length	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	Default	
ColumnWidth:	1560	
DisplayControl:	Text Box	
Ordinal Position:	1	
Required:	False	
Source Field:	PartNumber	
Source Table:	Tshop and parts	
InstPartNumber	Text	50
AllowZeroLength:	False	
Attributes:	Variable Length	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	Default	
ColumnWidth:	1800	
DisplayControl:	Text Box	
Ordinal Position:	2	
Required:	False	
Source Field:	InstPartNumber	
Source Table:	Tshop and parts	
TShopNumber	Text	50
AllowZeroLength:	False	
Attributes:	Variable Length	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	Default	
ColumnWidth:	945	
DisplayControl:	Text Box	
Ordinal Position:	3	
Required:	False	
Source Field:	TShopNumber	
Source Table:	Tshop and parts	

Relationships

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PartsTshop and parts

Parts		Tshop and parts
PartNumber	1 ∞	PartNumber

Attributes:	Enforced
Attributes:	One-To-Many

Tool shopTshop and parts

Tool shop		Tshop and parts
TShopNumber	1 ∞	TShopNumber

Attributes:	Enforced
Attributes:	One-To-Many

Table Indexes

Name	Number of Fields
PartsTshop and parts	1
Clustered:	False
Distinct Count:	5218
Foreign:	True
Ignore Nulls:	False
Name:	PartsTshop and parts
Primary:	False
Required:	False
Unique:	False
Fields:	PartNumber, Ascending
PrimaryKey	3
Clustered:	False
Distinct Count:	19733
Foreign:	False
Ignore Nulls:	False
Name:	PrimaryKey
Primary:	True
Required:	True
Unique:	True
Fields:	PartNumber, Ascending InstPartNumber, Ascending TShopNumber, Ascending
Tool shopTshop and parts	1
Clustered:	False
Distinct Count:	204
Foreign:	True
Ignore Nulls:	False
Name:	Tool shopTshop and parts
Primary:	False
Required:	False
Unique:	False

Fields:

TShopNumber, Ascending

User Permissions

admin

Group Permissions

Admins
Users

Year	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	2093	2094	2095	2096	2097	2098	2099	2100
1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	2093	2094	2095	2096	2097	2098	2099	2100	

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Properties

Date Created: 3/21/99 5:34:45 PM
Last Updated: 3/21/99 6:31:57 PM
Orientation: 0

Def. Updatable: False
OrderByOn: False
RecordCount: 790

Columns

Name	Type	Size
PEng	Number (Long)	4
AllowZeroLength: False Attributes: Fixed Size Collating Order: General ColumnHidden: False ColumnOrder: Default ColumnWidth: 645 Decimal Places: Auto Default Value: 0 DisplayControl: Text Box Ordinal Position: 1 Required: False Source Field: PEng Source Table: Tubes		
SEng	Number (Long)	4
AllowZeroLength: False Attributes: Fixed Size Collating Order: General ColumnHidden: False ColumnOrder: Default ColumnWidth: 645 Decimal Places: Auto Default Value: 0 DisplayControl: Text Box Ordinal Position: 2 Required: False Source Field: SEng Source Table: Tubes		
DwgNumber	Text	50
AllowZeroLength: False Attributes: Variable Length Collating Order: General ColumnHidden: False ColumnOrder: Default ColumnWidth: 1320 DisplayControl: Text Box Ordinal Position: 3 Required: False Source Field: DwgNumber Source Table: Tubes		
PartNumber	Text	50
AllowZeroLength: False		

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Attributes:
Collating Order:
ColumnHidden:
ColumnOrder:
ColumnWidth:
DisplayControl:
Ordinal Position:
Required:
Source Field:
Source Table:

Variable Length
General
False
Default
1695
Text Box
4
False
PartNumber
Tubes

MPQ Number (Long) 4

AllowZeroLength:
Attributes:
Collating Order:
ColumnHidden:
ColumnOrder:
ColumnWidth:
Decimal Places:
Default Value:
DisplayControl:
Ordinal Position:
Required:
Source Field:
Source Table:

False
Fixed Size
General
False
Default
600
Auto
0
Text Box
5
False
MPQ
Tubes

MRD Text 50

AllowZeroLength:
Attributes:
Collating Order:
ColumnHidden:
ColumnOrder:
ColumnWidth:
DisplayControl:
Ordinal Position:
Required:
Source Field:
Source Table:

False
Variable Length
General
False
Default
585
Text Box
6
False
MRD
Tubes

Qty Number (Long) 4

AllowZeroLength:
Attributes:
Collating Order:
ColumnHidden:
ColumnOrder:
ColumnWidth:
Decimal Places:
Default Value:
DisplayControl:
Ordinal Position:
Required:
Source Field:
Source Table:

False
Fixed Size
General
False
Default
465
Auto
0
Text Box
7
False
Qty
Tubes

EFrom Number (Long) 4

AllowZeroLength:
Attributes:

False
Fixed Size

Collating Order: General
ColumnHidden: False
ColumnOrder: Default
ColumnWidth: 765
Decimal Places: Auto
Default Value: 0
DisplayControl: Text Box
Ordinal Position: 8
Required: False
Source Field: EFrom
Source Table: Tubes

EfTo Number (Long) 4

AllowZeroLength: False
Attributes: Fixed Size
Collating Order: General
ColumnHidden: False
ColumnOrder: Default
ColumnWidth: 570
Decimal Places: Auto
Default Value: 0
DisplayControl: Text Box
Ordinal Position: 9
Required: False
Source Field: EfTo
Source Table: Tubes

InstPartNumber Text 255

AllowZeroLength: False
Attributes: Variable Length
Collating Order: General
ColumnHidden: False
ColumnOrder: Default
ColumnWidth: 1695
DisplayControl: Text Box
Ordinal Position: 10
Required: False
Source Field: InstPartNumber
Source Table: Tubes

MRDA Text 50

AllowZeroLength: False
Attributes: Variable Length
Collating Order: General
ColumnHidden: False
ColumnOrder: Default
ColumnWidth: Default
DisplayControl: Text Box
Ordinal Position: 11
Required: False
Source Field: MRDA
Source Table: Tubes

FrBL Number (Double) 8

AllowZeroLength: False
Attributes: Fixed Size
Collating Order: General

ColumnHidden: False
ColumnOrder: Default
ColumnWidth: Default
Decimal Places: 3
Default Value: 0
DisplayControl: Text Box
Format: Fixed
Ordinal Position: 12
Required: False
Source Field: FrBL
Source Table: Tubes

ToBL

Number (Double)

8

AllowZeroLength: False
Attributes: Fixed Size
Collating Order: General
ColumnHidden: False
ColumnOrder: Default
ColumnWidth: Default
Decimal Places: 3
Default Value: 0
DisplayControl: Text Box
Format: Fixed
Ordinal Position: 13
Required: False
Source Field: ToBL
Source Table: Tubes

FSTA

Number (Double)

8

AllowZeroLength: False
Attributes: Fixed Size
Collating Order: General
ColumnHidden: False
ColumnOrder: Default
ColumnWidth: Default
Decimal Places: 3
Default Value: 0
DisplayControl: Text Box
Format: Fixed
Ordinal Position: 14
Required: False
Source Field: FSTA
Source Table: Tubes

TSTA

Number (Double)

8

AllowZeroLength: False
Attributes: Fixed Size
Collating Order: General
ColumnHidden: False
ColumnOrder: Default
ColumnWidth: Default
Decimal Places: 3
Default Value: 0
DisplayControl: Text Box
Format: Fixed
Ordinal Position: 15
Required: False

Source Field: Source Table:		TSTA Tubes		
FWL	AllowZeroLength: Attributes: Collating Order: ColumnHidden: ColumnOrder: ColumnWidth: Decimal Places: Default Value: DisplayControl: Format: Ordinal Position: Required: Source Field: Source Table:	False Fixed Size General False Default Default 3 0 Text Box Fixed 16 False FWL Tubes	Number (Double)	8
TWL	AllowZeroLength: Attributes: Collating Order: ColumnHidden: ColumnOrder: ColumnWidth: Decimal Places: Default Value: DisplayControl: Format: Ordinal Position: Required: Source Field: Source Table:	False Fixed Size General False Default Default 3 0 Text Box Fixed 17 False TWL Tubes	Number (Double)	8
BLCG	AllowZeroLength: Attributes: Collating Order: ColumnHidden: ColumnOrder: ColumnWidth: Decimal Places: Default Value: DisplayControl: Format: Ordinal Position: Required: Source Field: Source Table:	False Fixed Size General False Default Default 3 0 Text Box Fixed 18 False BLCG Tubes	Number (Double)	8
STACG	AllowZeroLength: Attributes: Collating Order: ColumnHidden: ColumnOrder:	False Fixed Size General False Default	Number (Double)	8

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ColumnWidth: Default
Decimal Places: 3
Default Value: 0
DisplayControl: Text Box
Format: Fixed
Ordinal Position: 19
Required: False
Source Field: STACG
Source Table: Tubes

WLCG Number (Double) 8

AllowZeroLength: False
Attributes: Fixed Size
Collating Order: General
ColumnHidden: False
ColumnOrder: Default
ColumnWidth: Default
Decimal Places: 3
Default Value: 0
DisplayControl: Text Box
Format: Fixed
Ordinal Position: 20
Required: False
Source Field: WLCG
Source Table: Tubes

PartName Text 255

AllowZeroLength: False
Attributes: Variable Length
Collating Order: General
ColumnHidden: False
ColumnOrder: Default
ColumnWidth: Default
DisplayControl: Text Box
Ordinal Position: 21
Required: False
Source Field: PartName
Source Table: Tubes

T Text 255

AllowZeroLength: False
Attributes: Variable Length
Collating Order: General
ColumnHidden: False
ColumnOrder: Default
ColumnWidth: 390
DisplayControl: Text Box
Ordinal Position: 22
Required: False
Source Field: T
Source Table: Tubes

Width Number (Double) 8

AllowZeroLength: False
Attributes: Variable Length
Collating Order: General
ColumnHidden: False

ColumnOrder: Default
ColumnWidth: 705
Decimal Places: 3
DisplayControl: Text Box
Format: Fixed
Ordinal Position: 23
Required: False
Source Field: Width
Source Table: Tubes

Length Number (Double) 8

AllowZeroLength: False
Attributes: Variable Length
Collating Order: General
ColumnHidden: False
ColumnOrder: Default
ColumnWidth: 810
Decimal Places: 3
DisplayControl: Text Box
Format: Fixed
Ordinal Position: 24
Required: False
Source Field: Length
Source Table: Tubes

Height Number (Double) 8

AllowZeroLength: False
Attributes: Variable Length
Collating Order: General
ColumnHidden: False
ColumnOrder: Default
ColumnWidth: 765
Decimal Places: 3
DisplayControl: Text Box
Format: Fixed
Ordinal Position: 25
Required: False
Source Field: Height
Source Table: Tubes

Diameter Number (Double) 8

AllowZeroLength: False
Attributes: Variable Length
Collating Order: General
ColumnHidden: False
ColumnOrder: Default
ColumnWidth: 1020
Decimal Places: 3
DisplayControl: Text Box
Format: Fixed
Ordinal Position: 26
Required: False
Source Field: Diameter
Source Table: Tubes

Thickness Number (Double) 8

AllowZeroLength: False

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Attributes:	Variable Length
Collating Order:	General
ColumnHidden:	False
ColumnOrder:	Default
ColumnWidth:	1080
Decimal Places:	3
DisplayControl:	Text Box
Format:	Fixed
Ordinal Position:	27
Required:	False
Source Field:	Thickness
Source Table:	Tubes

Material	Text	255
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AllowZeroLength:	False
Attributes:	Variable Length
Collating Order:	General
ColumnHidden:	False
ColumnOrder:	Default
ColumnWidth:	1020
DisplayControl:	Text Box
Ordinal Position:	28
Required:	False
Source Field:	Material
Source Table:	Tubes

Weight	Number (Double)	8
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AllowZeroLength:	False
Attributes:	Variable Length
Collating Order:	General
ColumnHidden:	False
ColumnOrder:	Default
ColumnWidth:	825
Decimal Places:	3
DisplayControl:	Text Box
Format:	Fixed
Ordinal Position:	29
Required:	False
Source Field:	Weight
Source Table:	Tubes

Table Indexes

Name	Number of Fields
InstPartNumber	1
Clustered:	False
Distinct Count:	790
Foreign:	False
Ignore Nulls:	False
Name:	InstPartNumber
Primary:	False
Required:	False
Unique:	False
Fields:	InstPartNumber, Ascending
PrimaryKey	1

Clustered:	False
Distinct Count:	790
Foreign:	False
Ignore Nulls:	False
Name:	PrimaryKey
Primary:	True
Required:	True
Unique:	True
Fields:	InstPartNumber, Ascending

User Permissions

admin

Group Permissions

Admins
Users

Properties

Date Created: 2/27/99 11:52:53 PM
Last Updated: 6/29/99 11:07:29 PM
Orientation: 0

Def. Updatable: False
OrderByOn: False
RecordCount: 4246

Columns

Name	Type	Size
PEng	Number (Long)	4
AllowZeroLength:	False	
Attributes:	Fixed Size	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	Default	
ColumnWidth:	645	
Decimal Places:	Auto	
Default Value:	0	
Description:	Project Engineer	
DisplayControl:	Text Box	
Ordinal Position:	1	
Required:	False	
Source Field:	PEng	
Source Table:	Vibration	
VEng	Number (Long)	4
AllowZeroLength:	False	
Attributes:	Fixed Size	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	Default	
ColumnWidth:	705	
Decimal Places:	Auto	
Default Value:	0	
Description:	Vibration Engineer	
DisplayControl:	Text Box	
Ordinal Position:	2	
Required:	False	
Source Field:	VEng	
Source Table:	Vibration	
PartNumber	Text	50
AllowZeroLength:	False	
Attributes:	Variable Length	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	Default	
ColumnWidth:	1695	
Description:	Part Number	
DisplayControl:	Text Box	
Ordinal Position:	3	
Required:	False	
Source Field:	PartNumber	
Source Table:	Vibration	

FreqFrom	AllowZeroLength: False Attributes: Fixed Size Collating Order: General ColumnHidden: False ColumnOrder: Default ColumnWidth: 525 Decimal Places: Auto Default Value: 0 Description: From frequency cycles per second DisplayControl: Text Box Ordinal Position: 4 Required: False Source Field: FreqFrom Source Table: Vibration	Number (Long) 4
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FreqTo	AllowZeroLength: False Attributes: Fixed Size Collating Order: General ColumnHidden: False ColumnOrder: Default ColumnWidth: 810 Decimal Places: Auto Default Value: 0 Description: To frequency cycles per second DisplayControl: Text Box Ordinal Position: 5 Required: False Source Field: FreqTo Source Table: Vibration	Number (Long) 4
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Amplitude	AllowZeroLength: False Attributes: Fixed Size Collating Order: General ColumnHidden: False ColumnOrder: Default ColumnWidth: 960 Decimal Places: 3 Default Value: 0 Description: Amplitude in inches DisplayControl: Text Box Format: Fixed Ordinal Position: 6 Required: False Source Field: Amplitude Source Table: Vibration	Number (Double) 8
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Acceleration	AllowZeroLength: False Attributes: Variable Length Collating Order: General ColumnHidden: False ColumnOrder: Default ColumnWidth: 675 Description: Max acceleration in g	Text 50
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DisplayControl: Text Box
Ordinal Position: 7
Required: False
Source Field: Acceleration
Source Table: Vibration

ReportNumber		Text	50
AllowZeroLength:	False		
Attributes:	Variable Length		
Collating Order:	General		
ColumnHidden:	False		
ColumnOrder:	Default		
ColumnWidth:	1530		
Description:	Vibration Report Number		
DisplayControl:	Text Box		
Ordinal Position:	8		
Required:	False		
Source Field:	ReportNumber		
Source Table:	Vibration		

Remarks		Text	255
AllowZeroLength:	False		
Attributes:	Variable Length		
Collating Order:	General		
ColumnHidden:	False		
ColumnOrder:	Default		
ColumnWidth:	1440		
Description:	Remarks		
DisplayControl:	Text Box		
Ordinal Position:	9		
Required:	False		
Source Field:	Remarks		
Source Table:	Vibration		

Relationships

ManagementVibration

Management		Vibration
Eng	1 ∞ PEng	
Attributes:	Enforced	
Attributes:	One-To-Many	

PartsVibration

Parts		Vibration
PartNumber	1 1 PartNumber	
Attributes:	Unique, Enforced	
Attributes:	One-To-One	

ReportsVibration

Reports		Vibration	
ReportNumber		1	∞ ReportNumber
Attributes:		Enforced	
Attributes:		One-To-Many	

Table Indexes

Name	Number of Fields
ManagementVibration	1
Clustered:	False
Distinct Count:	8
Foreign:	True
Ignore Nulls:	False
Name:	ManagementVibration
Primary:	False
Required:	False
Unique:	False
Fields:	PEng, Ascending
PartsVibration	1
Clustered:	False
Distinct Count:	4246
Foreign:	True
Ignore Nulls:	False
Name:	PartsVibration
Primary:	False
Required:	False
Unique:	True
Fields:	PartNumber, Ascending
PEng	1
Clustered:	False
Distinct Count:	8
Foreign:	False
Ignore Nulls:	False
Name:	PEng
Primary:	False
Required:	False
Unique:	False
Fields:	PEng, Ascending
PrimaryKey	1
Clustered:	False
Distinct Count:	4246
Foreign:	False
Ignore Nulls:	False
Name:	PrimaryKey
Primary:	True
Required:	True
Unique:	True
Fields:	PartNumber, Ascending

ReportNumber	1
Clustered:	False
Distinct Count:	1
Foreign:	False
Ignore Nulls:	False
Name:	ReportNumber
Primary:	False
Required:	False
Unique:	False
Fields:	ReportNumber, Ascending
ReportsVibration	1
Clustered:	False
Distinct Count:	1
Foreign:	True
Ignore Nulls:	False
Name:	ReportsVibration
Primary:	False
Required:	False
Unique:	False
Fields:	ReportNumber, Ascending
VEng	1
Clustered:	False
Distinct Count:	1
Foreign:	False
Ignore Nulls:	False
Name:	VEng
Primary:	False
Required:	False
Unique:	False
Fields:	VEng, Ascending

User Permissions

admin

Group Permissions

Admins
Users

Properties

Date Created: 4/27/98 9:17:33 PM
Last Updated: 6/29/99 11:03:39 PM
OrderByOn: False
RecordCount: 1195

Def. Updatable: False
OrderBy: WBS.ReportNumber
Orientation: 0

Columns

Name	Type	Size
Eng	Number (Long)	4
AllowZeroLength: False		
Attributes: Fixed Size		
Collating Order: General		
ColumnHidden: False		
ColumnOrder: Default		
ColumnWidth: 510		
Decimal Places: Auto		
Default Value: 0		
Description: Engineer		
DisplayControl: Text Box		
Ordinal Position: 1		
Required: False		
Source Field: Eng		
Source Table: WBS		
WBS	Number (Long)	4
AllowZeroLength: False		
Attributes: Fixed Size		
Collating Order: General		
ColumnHidden: False		
ColumnOrder: Default		
ColumnWidth: 615		
Decimal Places: Auto		
Default Value: 0		
Description: Work Building Structure		
DisplayControl: Text Box		
Ordinal Position: 2		
Required: False		
Source Field: WBS		
Source Table: WBS		
WorkDescription	Text	255
AllowZeroLength: False		
Attributes: Variable Length		
Collating Order: General		
ColumnHidden: False		
ColumnOrder: Default		
ColumnWidth: 4830		
Description: Work Description		
DisplayControl: Text Box		
Ordinal Position: 3		
Required: False		
Source Field: WorkDescription		

Source Table:	WBS	
ReportNumber		Text 50
AllowZeroLength:	False	
Attributes:	Variable Length	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	Default	
ColumnWidth:	Default	
Description:	Report Number	
DisplayControl:	Text Box	
Ordinal Position:	4	
Required:	False	
Source Field:	ReportNumber	
Source Table:	WBS	

Relationships

ManagementWBS

Management	WBS
Eng	1 ∞ Eng
Attributes:	Enforced
Attributes:	One-To-Many

WBSDrawings

WBS	Drawings
WBS	1 ∞ WBS
Attributes:	Enforced
Attributes:	One-To-Many

WBSOrders

WBS	Orders
WBS	1 ∞ WBS
Attributes:	Enforced
Attributes:	One-To-Many

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WBSProduction WBS

WBS		Production WBS	
WBS	1	∞	WBS
Attributes:		Enforced	
Attributes:		One-To-Many	

WBSProduction WBS1

WBS		Production WBS	
WBS	1	∞	WBS
Attributes:		Enforced	
Attributes:		One-To-Many	

WBSReports

WBS		Reports	
WBS	1	∞	WBS
Attributes:		Enforced	
Attributes:		One-To-Many	

Table Indexes

Name	Number of Fields
Eng	1
Clustered:	False
Distinct Count:	191
Foreign:	False
Ignore Nulls:	False
Name:	Eng
Primary:	False
Required:	False
Unique:	False
Fields:	Eng, Ascending
ManagementWBS	1
Clustered:	False
Distinct Count:	191
Foreign:	True
Ignore Nulls:	False
Name:	ManagementWBS
Primary:	False
Required:	False
Unique:	False
Fields:	Eng, Ascending
PrimaryKey	1

Clustered:	False
Distinct Count:	1195
Foreign:	False
Ignore Nulls:	False
Name:	PrimaryKey
Primary:	True
Required:	True
Unique:	True
Fields:	WBS, Ascending
ReportNumber	1
Clustered:	False
Distinct Count:	1
Foreign:	False
Ignore Nulls:	False
Name:	ReportNumber
Primary:	False
Required:	False
Unique:	False
Fields:	ReportNumber, Ascending

User Permissions

admin

Group Permissions

Admins
Users

Properties

Date Created: 4/27/98 9:25:01 PM
Last Updated: 6/29/99 10:27:30 PM
Orientation: 0

Def. Updatable: False
OrderByOn: False
RecordCount: 5036

Columns

Name	Type	Size
PEng	Number (Long)	4
AllowZeroLength:	False	
Attributes:	Fixed Size	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	Default	
ColumnWidth:	645	
Decimal Places:	Auto	
Default Value:	0	
Description:	Project Engineer	
DisplayControl:	Text Box	
Ordinal Position:	1	
Required:	False	
Source Field:	PEng	
Source Table:	Weight	
WEng	Number (Long)	4
AllowZeroLength:	False	
Attributes:	Fixed Size	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	Default	
ColumnWidth:	705	
Decimal Places:	Auto	
Default Value:	0	
Description:	Weight Engineer	
DisplayControl:	Text Box	
Ordinal Position:	2	
Required:	False	
Source Field:	WEng	
Source Table:	Weight	
PartNumber	Text	50
AllowZeroLength:	False	
Attributes:	Variable Length	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	Default	
ColumnWidth:	1695	
Description:	Part Number	
DisplayControl:	Text Box	
Ordinal Position:	3	
Required:	False	
Source Field:	PartNumber	
Source Table:	Weight	

TargetW	Number (Double)	8
AllowZeroLength:	False	
Attributes:	Fixed Size	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	Default	
ColumnWidth:	960	
Decimal Places:	3	
Default Value:	0	
Description:	Target weight	
DisplayControl:	Text Box	
Ordinal Position:	4	
Required:	False	
Source Field:	TargetW	
Source Table:	Weight	
WeightRep	Text	50
AllowZeroLength:	False	
Attributes:	Variable Length	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	Default	
ColumnWidth:	1350	
Description:	Weight Report Number	
DisplayControl:	Text Box	
Ordinal Position:	5	
Required:	False	
Source Field:	WeightRep	
Source Table:	Weight	
Remarks	Text	255
AllowZeroLength:	False	
Attributes:	Variable Length	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	Default	
ColumnWidth:	Default	
Description:	Remarks	
DisplayControl:	Text Box	
Ordinal Position:	6	
Required:	False	
Source Field:	Remarks	
Source Table:	Weight	

Relationships

ManagementWeight

Management	Weight
Eng	1 ∞ PEng
Attributes:	Enforced
Attributes:	One-To-Many

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ManagementWeight1

Management	Weight
Eng	1 ∞ WEng
Attributes:	Enforced
Attributes:	One-To-Many

PartsWeight

Parts	Weight
PartNumber	1 1 PartNumber
Attributes:	Unique, Enforced
Attributes:	One-To-One

ReportsWeight

Reports	Weight
ReportNumber	1 ∞ WeightRep
Attributes:	Enforced
Attributes:	One-To-Many

Table Indexes

Name	Number of Fields
ManagementWeight	1
Clustered:	False
Distinct Count:	1
Foreign:	True
Ignore Nulls:	False
Name:	ManagementWeight
Primary:	False
Required:	False
Unique:	False
Fields:	PEng, Ascending
ManagementWeight1	1
Clustered:	False
Distinct Count:	1
Foreign:	True
Ignore Nulls:	False
Name:	ManagementWeight1
Primary:	False
Required:	False
Unique:	False
Fields:	WEng, Ascending
PartsWeight	1

	Clustered:	False
	Distinct Count:	5036
	Foreign:	True
	Ignore Nulls:	False
	Name:	PartsWeight
	Primary:	False
	Required:	False
	Unique:	True
	Fields:	PartNumber, Ascending
PEng		1
	Clustered:	False
	Distinct Count:	1
	Foreign:	False
	Ignore Nulls:	False
	Name:	PEng
	Primary:	False
	Required:	False
	Unique:	False
	Fields:	PEng, Ascending
PrimaryKey		1
	Clustered:	False
	Distinct Count:	5036
	Foreign:	False
	Ignore Nulls:	False
	Name:	PrimaryKey
	Primary:	True
	Required:	True
	Unique:	True
	Fields:	PartNumber, Ascending
ReportsWeight		1
	Clustered:	False
	Distinct Count:	1
	Foreign:	True
	Ignore Nulls:	False
	Name:	ReportsWeight
	Primary:	False
	Required:	False
	Unique:	False
	Fields:	WeightRep, Ascending
WeightRep		1
	Clustered:	False
	Distinct Count:	1
	Foreign:	False
	Ignore Nulls:	False
	Name:	WeightRep
	Primary:	False
	Required:	False
	Unique:	False
	Fields:	WeightRep, Ascending
WEng		1
	Clustered:	False
	Distinct Count:	1
	Foreign:	False
	Ignore Nulls:	False

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Table: Weight

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Name:	WEng
Primary:	False
Required:	False
Unique:	False
Fields:	WEng, Ascending

User Permissions

admin

Group Permissions

Admins
Users

6017318-122000

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Properties

Date Created: 3/9/99 9:34:23 PM
Last Updated: 3/9/99 10:57:32 PM
Orientation: 0

Def. Updatable: False
OrderByOn: False
RecordCount: 5343

Columns

Name	Type	Size
PartNumber	Text	50
AllowZeroLength:	False	
Attributes:	Variable Length	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	Default	
ColumnWidth:	1800	
Description:	Part Number	
DisplayControl:	Text Box	
Ordinal Position:	0	
Required:	False	
Source Field:	PartNumber	
Source Table:	WPart	
Mat	Text	50
AllowZeroLength:	False	
Attributes:	Variable Length	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	Default	
ColumnWidth:	495	
Description:	Part Material category - Design To Cost	
DisplayControl:	Text Box	
Ordinal Position:	10	
Required:	False	
Source Field:	Mat	
Source Table:	WPart	
Form	Text	50
AllowZeroLength:	False	
Attributes:	Variable Length	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	Default	
ColumnWidth:	645	
Description:	Part/Assy Form category - Design To Cost	
DisplayControl:	Text Box	
Ordinal Position:	11	
Required:	False	
Source Field:	Form	
Source Table:	WPart	
Pro	Text	50
AllowZeroLength:	False	
Attributes:	Variable Length	

Collating Order:	General
ColumnHidden:	False
ColumnOrder:	Default
ColumnWidth:	900
Description:	Part/Assy Process category - Design To Cost
DisplayControl:	Text Box
Ordinal Position:	12
Required:	False
Source Field:	Pro
Source Table:	WPart

Compl	Number (Long)	4
AllowZeroLength:	False	
Attributes:	Fixed Size	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	Default	
ColumnWidth:	765	
Decimal Places:	Auto	
Default Value:	0	
Description:	Part/Assy Complexity category - Design To Cost	
DisplayControl:	Text Box	
Ordinal Position:	13	
Required:	False	
Source Field:	Compl	
Source Table:	WPart	

Relationships

PartsWPart

	Parts	WPart
	1	1
PartNumber		PartNumber
Attributes:		Unique, Enforced
Attributes:		One-To-One

Table Indexes

Name	Number of Fields
PartsWPart	1
Clustered:	False
Distinct Count:	5343
Foreign:	True
Ignore Nulls:	False
Name:	PartsWPart
Primary:	False
Required:	False
Unique:	True
Fields:	PartNumber, Ascending
PrimaryKey	1
Clustered:	False
Distinct Count:	5343

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Table: WPart

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Foreign:	False
Ignore Nulls:	False
Name:	PrimaryKey
Primary:	True
Required:	True
Unique:	True
Fields:	PartNumber, Ascending

User Permissions

admin

Group Permissions

Admins
Users

00000000-0000-0000-0000-00000000

Properties

Date Created: 4/27/98 9:41:24 PM
Last Updated: 5/29/99 11:35:38 AM
Orientation: 0

Def. Updatable: False
OrderByOn: False
RecordCount: 1680

Columns

Name	Type	Size
WTGC	Text	50
AllowZeroLength: False Attributes: Variable Length Collating Order: General ColumnHidden: False ColumnOrder: Default ColumnWidth: 750 Description: Design-to-Cost Work Type Group Code DisplayControl: Text Box Ordinal Position: 1 Required: False Source Field: WTGC Source Table: WTGC		
Setup	Number (Double)	8
AllowZeroLength: False Attributes: Fixed Size Collating Order: General ColumnHidden: False ColumnOrder: Default ColumnWidth: 705 Decimal Places: 2 Default Value: 0 Description: Set-up time in hours DisplayControl: Text Box Format: Fixed Ordinal Position: 2 Required: False Source Field: Setup Source Table: WTGC		
Run	Number (Double)	8
AllowZeroLength: False Attributes: Fixed Size Collating Order: General ColumnHidden: False ColumnOrder: Default ColumnWidth: 525 Decimal Places: 2 Default Value: 0 Description: Run time in hours DisplayControl: Text Box Format: Fixed Ordinal Position: 3 Required: False		

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Table: WTGC

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Source Field:	Run	
Source Table:	WTGC	
Remarks		Text
AllowZeroLength:	False	50
Attributes:	Variable Length	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	Default	
ColumnWidth:	Default	
Description:	Remarks	
DisplayControl:	Text Box	
Ordinal Position:	4	
Required:	False	
Source Field:	Remarks	
Source Table:	WTGC	

Table Indexes

Name	Number of Fields
PrimaryKey	1
Clustered:	False
Distinct Count:	1680
Foreign:	False
Ignore Nulls:	False
Name:	PrimaryKey
Primary:	True
Required:	True
Unique:	True
Fields:	WTGC, Ascending

User Permissions

admin

Group Permissions

Admins
Users

50173748-123000

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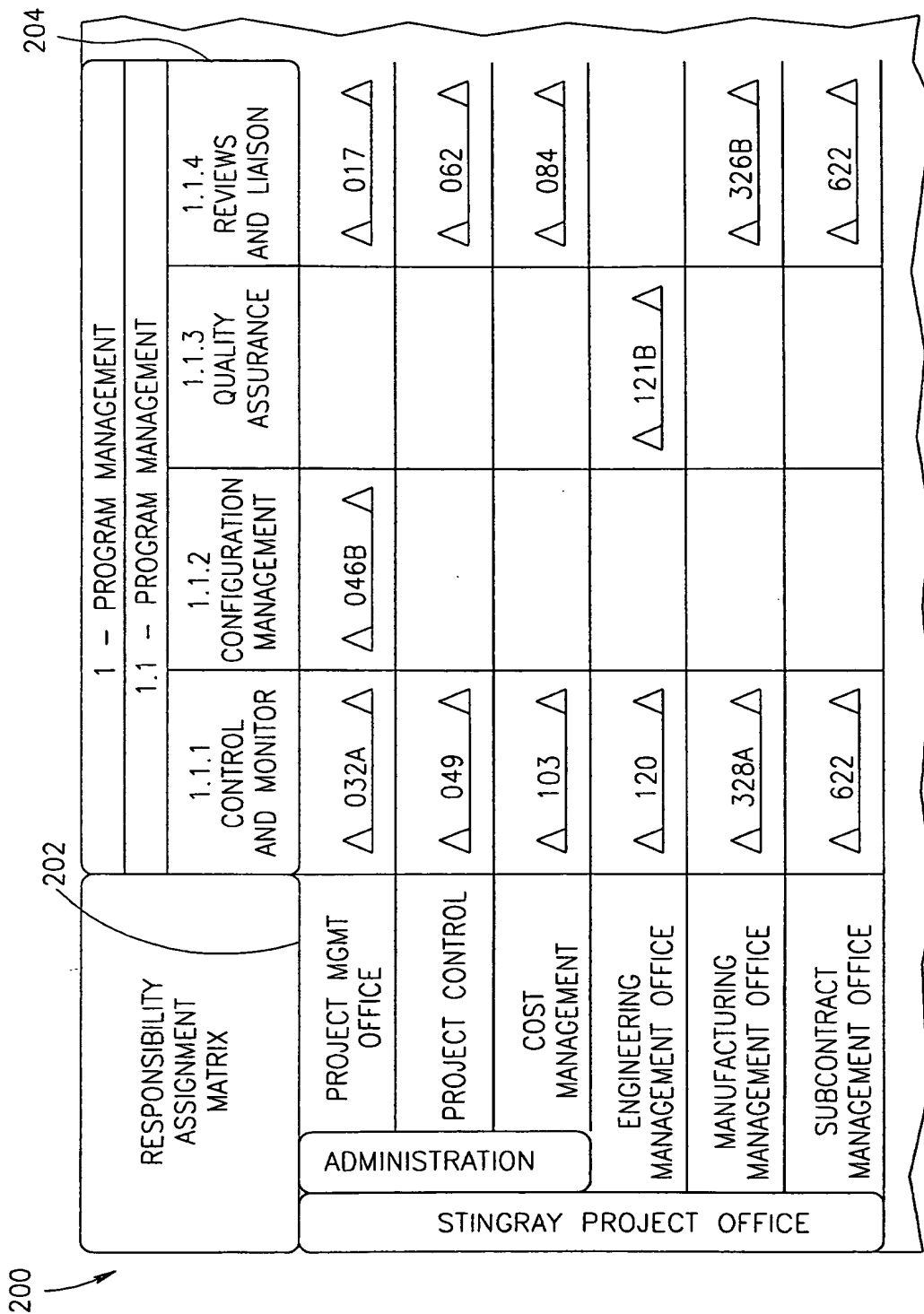


FIG.6

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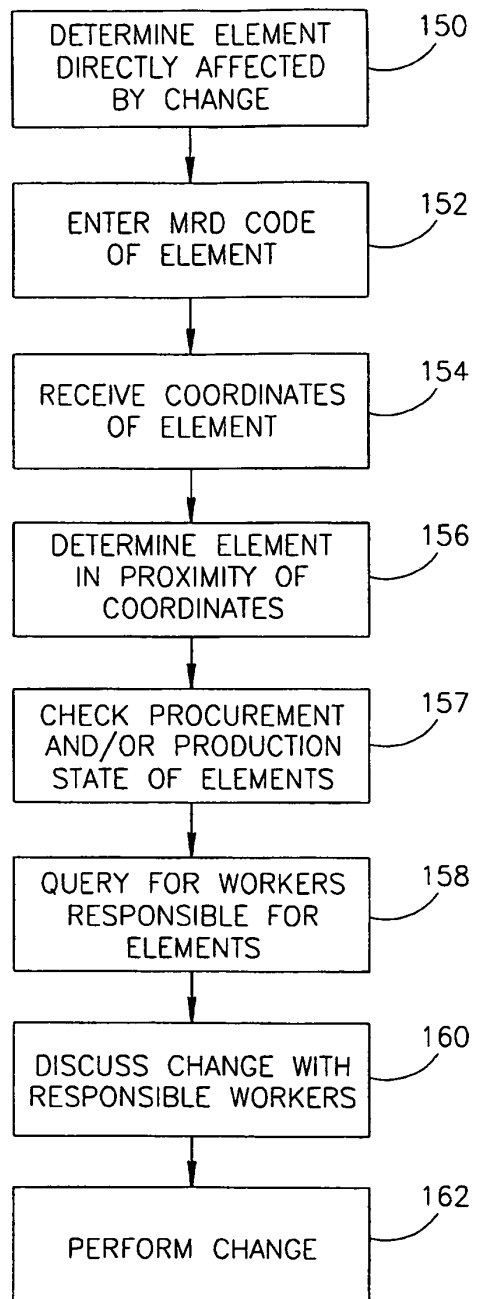


FIG.5

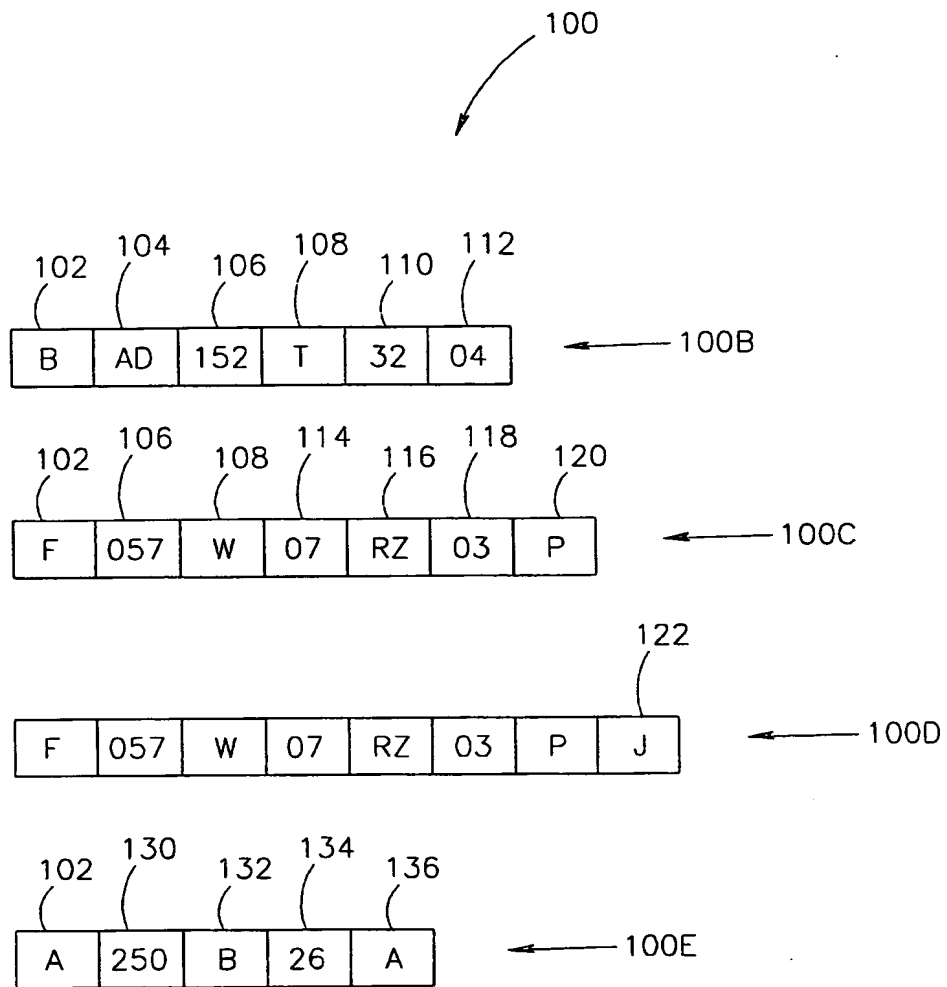


FIG.4

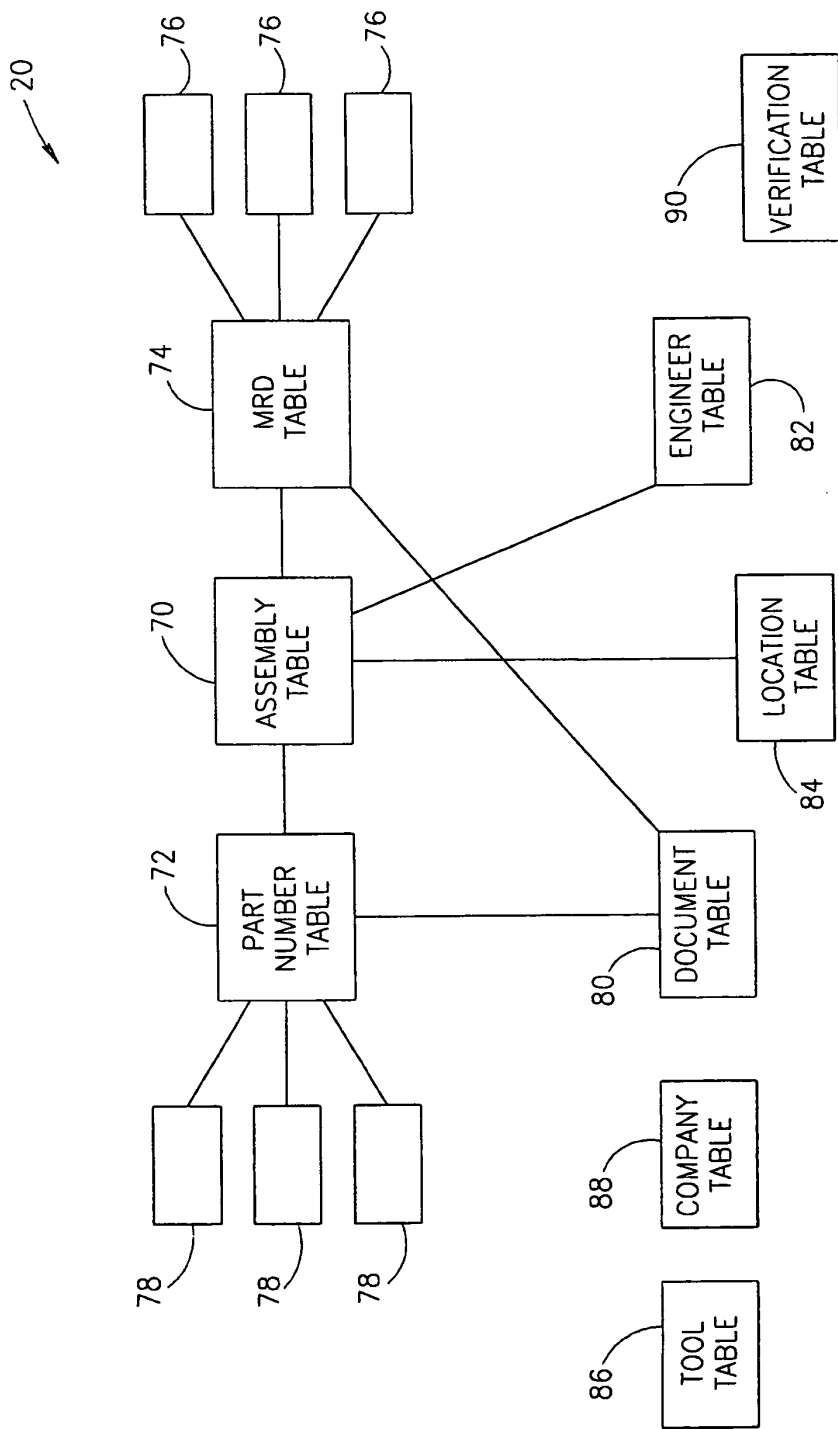


FIG.3

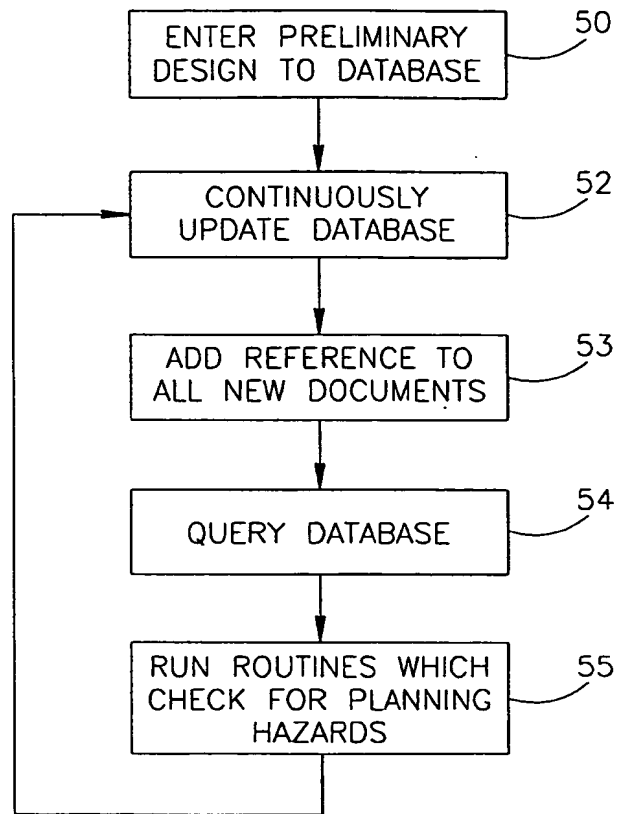
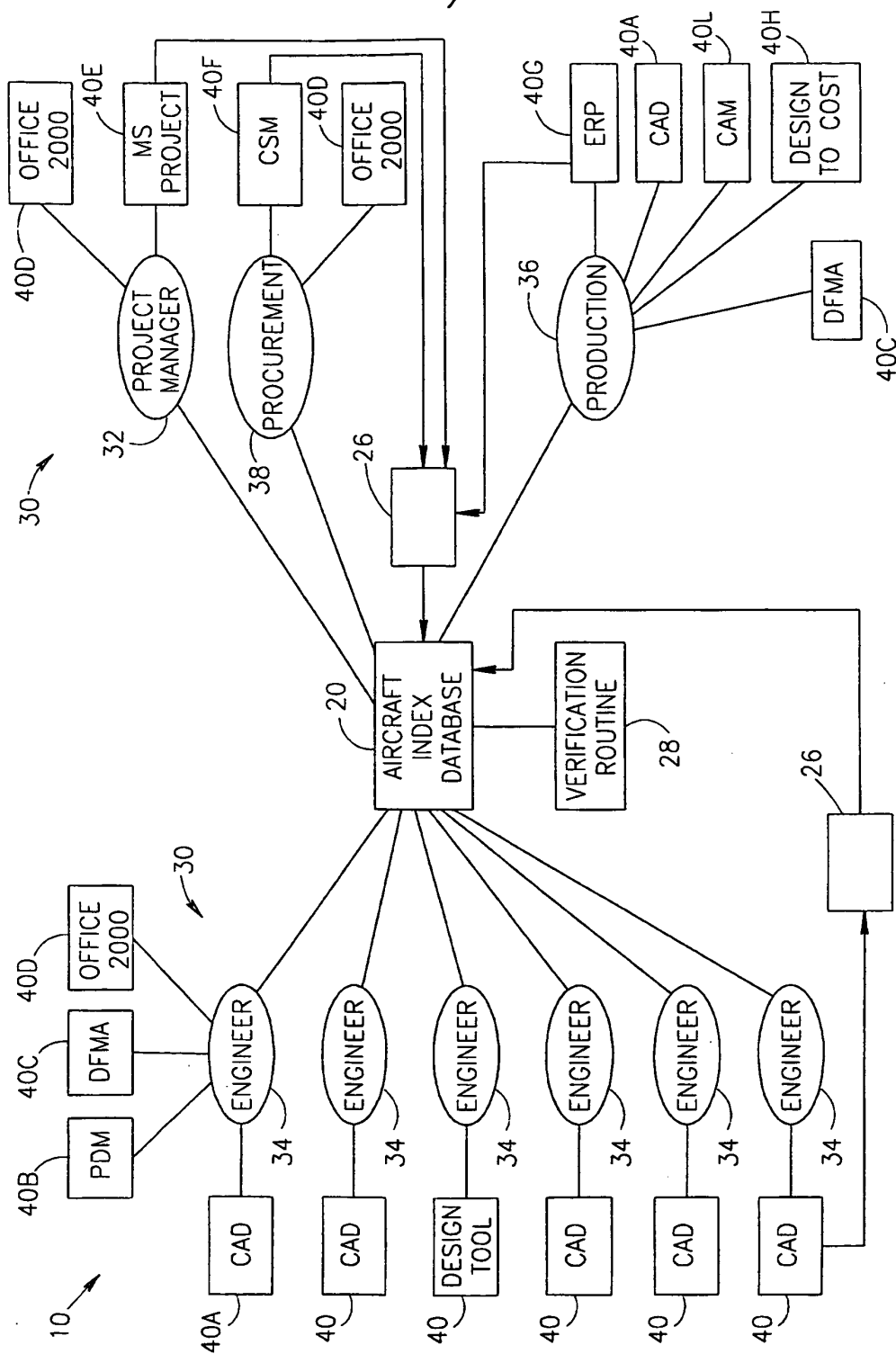
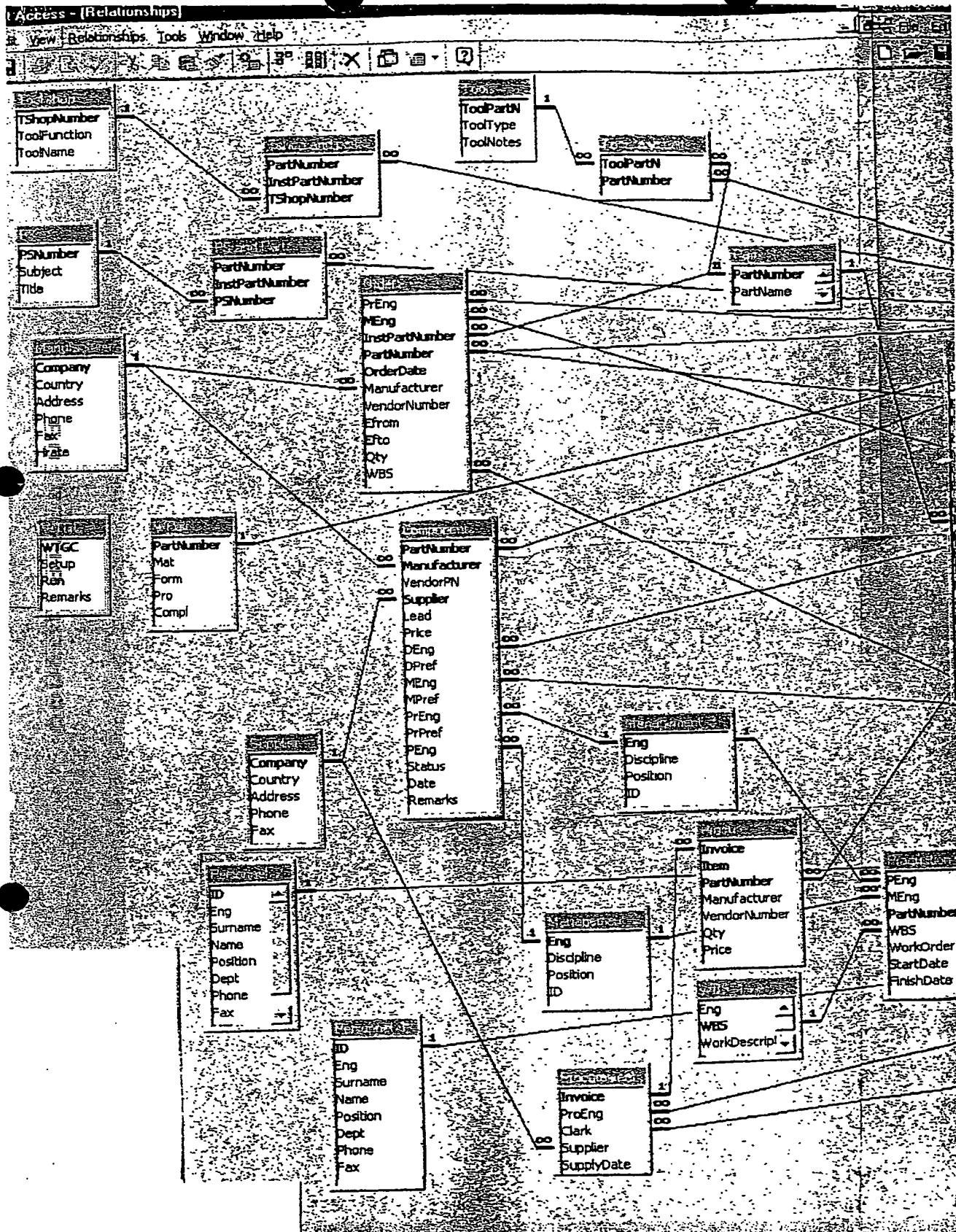


FIG.2





Development And Production Integrated Management

OPIN scheme form

Project and Management database

Personnel Staff form	Personnel Staff report	MRD Responsibility form
Project Management form	Project Management report	
WBS form	WBS report	FAR form

Engineering database

MRD Part form	Part form	MRD GDS form	MRD Code report	MRD function by structure report
Drawings form	Drawings report	Reports form	Reports list	System Analysis Systems list
MRD Design Criteria form	MRD Design Criteria report	MRD Technical Data form	MRD Technical Data report	
	Action Items form	Action Items		
MRD Dynamic Loads form	MRD Dynamic Loads report	Weights form	MRD Weight report	
MRD Critical Parts form	MRD Critical Part report	Survivability criteria form	Survivability Code form	
Grounding form	Grounding report	Survivability bay (database) report	Survivability Code list	
FAR regulation report	FAR regulation subform (for MRD part)	Survivability minimum separation report		
Preferred Parts (mechanical) report	Preferred Parts (electrical) report	PS form	Process standards report	
MRD Structure Penetration form	MRD Structure Penetration report			
MRD Systems Penetration form	MRD Systems Penetration report			
Bay form	Bay report	MRD Parts Bay Location report		
Access Door form	Access Doors report	MRD Parts Access Door report	Part Replacement Units (PRU) form	
MRD Maintenance form	MRD Maintenance report		Line Replacement Units (LNU) report	
MRD Reliability form	MRD Reliability report	MRD Failure Part form	MRD Failure Items report	
Flight Test form	MRD Flight Test report	Ground Test form	MRD Ground Test report	

Production database

Production Route Card	Production Route Card report	MRD Technology form	Technology report
Orders form	Orders report	Tool form	Tool shop report
Tool form	Tool shop report	Tool on job	
Lead Lead Items (ALI) form	Lead Lead Items (ALI) report		

Procurement database

MRD Advanced Material Order (AMO) form	MRD AMO report	AMO Report	
Components selection form	Components list report	Manufacturers form	Manufacturers list report
Procurement form	Procurement report	Suppliers form	Suppliers list report

Integrated Engineering Methodologies and Analysis

Design-to-cost form	MRD Design-to-Cost report	MRD OFMA Analysis report	OFMA form
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60172718-123000

ACCESS DOOR FORM

Print date: 02-Jul-99

Report Number: DPM101R005 Report Name: Access doors provision & substantiation

Is: B Date: 15-Nov-97 Update: 03-Mar-98 WBS: 12122

Name: Morrow Joshua Dept: 2341 Phone: 6039

Access Door: 111-AL Access Door BRD: A211RA

Dwg Number: DPM2110100 Door Part Number: DPM2110100-501 Door Part Name: Radome assy

Width in (in): 36.800 Length in (in): 36.400 Height in (in): 25.000 Weight in (lb): 61.320

Access door center of gravity in inches in aircraft coordinates: BLEC: 0.00 STAGC: 160.00 WLCG: 33.00

Access door envelope in inches in general aircraft coordinates:

From BL: -18.40 To BL: 18.40 From STA: 144.00 To STA: 169.00 From WL: 6.90 To WL: 43.30

Door Attachment: 2 axts & 4 latches Door Notes: Nose radome

Units maintenance:

Units MRD	Units Part Number	Units Part Name	System	Subsystem	Subsystems	Bay	Door
R513	DPM7619552-501	Weather radar antenna	Avionics	Navigation	W/radar	111	111-AL
R513	DPM7619551-501	Weather radar antenna	Avionics	Navigation	W/radar	111	111-AL
R513J	MS90335C24B56S	Receptacle	Avionics	Navigation	W/radar	111	111-AL
R513P	MS90335C24B56P	Plug	Avionics	Navigation	Weather radar	111	111-AL
ZFTJ025	DPM0666510-501	Flight test pitot static cone	Flight test	Flight control	Anemometry	111	111-AL
ZFTJ026	DPM0666510-502	Flight test pitot static cone	Flight test	Flight control	Anemometry	111	111-AL
ZFTJ027	DPM0666511-501	Flight test, pitot static sensor	Flight test	Flight control	Anemometry	111	111-AL
ZFTJ028	DPM0666511-502	Flight test, pitot static sensor	Flight test	Flight control	Anemometry	111	111-AL
ZFTR001	DPM0662111-501	Flight test radome	Flight test	Structure	Nose	111	111-AL

ACTION ITEMS FORM

Print date: 02-Jul-99

Action item number: 1025

Question Date: 1/1/97

Drawing Number: DPM7293500

Drawing Name: Electrical harness

Iss: C

Orig: 88

Position: Production centre fus.sys.engine

Name: Hue Rose

Dept: 3462

Phone: 3344

AEnd: 731

Position: Electrical power DC engineer

Name: Titus Richard

Dept: 2371

Phone: 9256

Designer name: Tarr Nigel

Dept: 2374

Answer Date: 7/14/98

Action items summary

Item	Part Number	Part Name	MRD Effect	Question	Answer
1	DPM7293500-501	Electrical harness	WC1323	1: Requested a note for attachment to plugs of P/N DPM7293500-501, WC1323	Accepted. Will be updated in the next issue C of the dwg DPM7293500
2	DPM7293500-502	Electrical harness	WC1324	1: Requested a note to clean before instl of P/N DPM7293500-502, WC1324	These remarks will be included in the next issue C of the dwg DPM7293500
3	DPM7293500-503	Electrical harness	WC1325	1: Requested a note for insulation of P/N DPM7293500-503, WC1325	The change will be included in the next issue C of the dwg DPM7293500
4	DPM7293500-504	Electrical harness	WC1326	1: Requested a note for testing before instl of P/N DPM7293500-504, WC1326	Partially accepted and will be introduced in the next issue C of the dwg DPM7293500
5	DPM7293500-505	Electrical harness	WC1327	1: Requested a note for wire preparation of P/N DPM7293500-505, WC1327	The change will be included for serial a/c in the next issue C of the dwg DPM7293500
6	DPM7293500-506	Electrical harness	WC1328	1: Requested a note for geometrical definition of P/N DPM7293500-506, WC1328	A change require redesign and will be introduced in the next issue C of the dwg DPM7293500

Bay form

Print date: 02-Jul-99

Aircraft Bay: 351 Bay Name: Tail tank LHS

Bay envelope in aircraft coordinate system (in)

From BL -35.00 To BL 35.00 From STA 718.00 To STA 750.00 From WL 50.00 To WL 92.00

Bay Notes: Bays 351+352 fuel capacity 184 US gal

Units maintenance

Units MRD	Units Part Number	Units Part Name	System	Subsystem	Subsystems	Bay, Door
F051	DPM6221544-501	Transfer jet pump	Fluid	Fuel	Transfer	351 : 351-AZ
F051	DPM6221554-501	Transfer jet pump	Fluid	Fuel	Transfer	351 : 351-AZ
F051J	M83723F16B32S	Receptacle	Electrical	Fuel	Transfer	351 : 351-AZ
F051P	M83723F16B32P	Plug	Electrical	Fuel	Transfer	351 : 351-AZ
F051X1	W901B32	Ferrule	Fluid	Fuel	Transfer	351 : 351-AZ
F051X2	MS33656-08	Outlet end 1/2"	Fluid	Fuel	Transfer	351 : 351-AZ
F051X3	DPM6221554-031	Flapper valve opening	Fluid	Fuel	Transfer	351 : 351-AZ
F051Y1	W901B32	Ferrule	Fluid	Fuel	Transfer	351 : 351-AZ
F051Y2	AN818D08	Nut - coupling 1/2"	Fluid	Fuel	Transfer	351 : 351-AZ
F075	DPM6250620-501	Float pilot control valve	Fluid	Fuel	Refuel/Defuel	351 : 351-AT
F076	DPM6250620-501	Float pilot control valve	Fluid	Fuel	Refuel/Defuel	351 : 351-AT
F079	DPM6250573-501	Gravity refueling with neg.valve	Fluid	Fuel	Refuel/Defuel	351 : 351-AT
F095	DPM6250625-501	Scavenge jet pump	Fluid	Fuel	Vent	351 : 351-AT
F095	DPM6250626-501	Scavenge jet pump	Fluid	Fuel	Vent	351 : 351-AT
F095J	M83723A22B36S	Receptacle	Electrical	Fuel	Vent	351 : 351-AT
F095P	M83723A22B36P	Plug	Electrical	Fuel	Vent	351 : 351-AT
F095X1	W901B32	Ferrule	Fluid	Fuel	Vent	351 : 351-AT
F095X2	DPM6250625-019	Cap, Scavenge jet pump	Fluid	Fuel	Vent	351 : 351-AT
F095Y1	W901B32	Ferrule	Fluid	Fuel	Vent	351 : 351-AT
F099	DPM6230725-501	Vent drain box	Fluid	Fuel	Vent	351 : 351-AZ
F121	DPM6200112-507	Drain valve	Fluid	Fuel	Drain	351 : 351-AZ
F122	DPM6200112-507	Drain valve	Fluid	Fuel	Drain	351 : 351-AZ
F219	DPM7450031-507	Fuel low sensor	Electrical	Fuel	Fuel management	351 : 351-AZ
F219J	M83541F10B24S	Receptacle	Electrical	Fuel	Fuel management	351 : 351-AZ
F219P	M83541F10B24P	Plug	Electrical	Fuel	Fluid measurement	351 : 351-AZ
FBF63-20	DPM6205005-001	Bulkhead fitting 1 1/4"	Fluid	Fuel	Vent	351 : 351-AZ
FD006-24	DPM6252106-501	Tube assy	Fluid	Fuel	Defueling	351 : 351-AT
FF021-16	DPM6211121-501	Tube assy	Fluid	Fuel	Feed Engine LH	351 : 351-AT
FM023-08	DPM6211223-501	Tube assy	Fluid	Fuel	Motive	351 : 351-AZ
FM024-08	DPM6211224-501	Tube assy	Fluid	Fuel	Motive	351 : 351-AZ
FR010-32	DPM6251110-501	Tube assy	Fluid	Fuel	Refueling	351 : 351-AT
FT017-32	DPM6221117-501	Tube assy	Fluid	Fuel	Transfer	351 : 351-AZ
FV011-32	DPM6231111-501	Tube assy	Fluid	Fuel	Vent	351 : 351-AZ
FV027-20	DPM6231127-501	Tube assy	Fluid	Fuel	Vent	351 : 351-AZ
WC1395	DPM7293200-525	Aft fuselage electrical harness	Electrical	Fuel	Fluid measurement	351 : 351-AT
WC1793	DPM7293200-503	Aft fuselage electrical harness	Electrical	Fuel	Vent	351 : 351-AZ
WC1795	DPM7293200-505	Aft fuselage electrical harness	Electrical	Fuel	Fluid measurement	351 : 351-AT

Components MRD part selection form

Print date: 26-Feb-99

PEng: 4 Position: Project structure engineer PEng Name: Carter Colin Dept: 2210 Phone: 6437

SEng: 121 Position: Wing inb'd fuel tank str. engineer SEng Name: Dole Tony Dept: 2346 Phone: 5748

MRD: A120B02L Type: MP

Drawing Number: DPM1200060 Drawing Name: Wing spar 2 Iss: A

Part Number: DPM1200060-001 Part Name: Spar 2, LH

Weight (lb): 18.973 Material: AL7075-T7351

Width (in): 3.25 Length (in): 77.1 Height (in): 14 Diameter (in): 0 Thickness (in): 3.25

Part envelope and center of gravity in general aircraft coordinates in inches BL CG: 76.00 STA CG: 534.40 WL CG: 10.20

From BL: 76.0 To BL: 76.0 From STA: 423.0 To STA: 499.0 From WL: 1.7 To WL: 18.8

Inst Part Number: DPM1200010-501 Inst Part Name: Fwd spar assy, LH

System: Structure Subsystem: Wing Subsystems: Torsion box

Assembly

PEng	SEng	DwgNumber	PartNumber	MPQ	MRD	Qty	EFrom	ETo	InstPartNumber
4	121	DPM1200060	DPM1200060-001	1	A120B02	1	1	999	DPM1200010-501

Component dimensions comparison for unique MRD with different part numbers

MRD	Inst Part Number	Part Number	Type	Width (in)	Length (in)	Height (in)	Diamet (in)	Thickd (in)	Material	Weight (lb)
A120B02L	DPM1200010-501	DPM1200060-001	MP	3.250	77.100	14.000	0.000	3.250	AL7075-T7351	18.973

MRD part manufacturing technology

MRD	Part number	Technology	Heat Treat	Pretreatment	Finish
A120B02L	DPM1200060-001	5 axis	Chromic acid anodize	Integral fuel tank coat	

Production Design to Cost evaluation

Part Number	Qty	Work type	Setup time in	Run time in	Manufacturer	Hour rate in \$	Cost in \$	Remarks
DPM1200060-001	1	BADK	1.39	0.93	Mill Vision	\$60.14	\$139.52	
DPM1200060-001	1	BADK	1.39	0.93	Mill Computer	\$95.68	\$221.98	

Tool Design to Cost evaluation

Part Number	Tool Part Number	Work type	Setup time in	Run time in	Manufacturer	Hour rate in \$	Cost in \$	Remarks
DPM1200060-001	DPM0741160-501	EAH	1.11	0.65	MasterTool	\$52.76	\$92.86	

Technical data

Components MRD part selection form

Print date: 26-Feb-99

Component interface:

Bay and Door:

Reliability:

Maintenance service:

Project Status: 1 - Permitted for Design and Procurement, 2 - Rejected for Design, Rejected and Procurement, 3 - Forbidden for Design and Procurement in the project. Selection preference for Design, Manufacture or Procurement is 1.

Components selection by Design, Manufacturing and Procurement

MRD#	Part Number	Manufacturer	Vendor Part Number	Supplier	Lead time	Price	De	Pr	Man	Pr	Pr	Pr	Pr	Pr	Pr	Date
A120B021	DPM1200060-001	Mill Vision		Mill Vision	50	4,066.43	121	1	81	2	75	2	9	3	10-Jan-9	
A120B021	DPM1200060-001	Mill Computer		Mill Computer	40	3,598.61	121	1	81	1	75	1	9	1	10-Jan-9	

Components MRD part selection form

Print date: 26-Feb-99

PEng: 5 Position: Project mechanical engineer PEng Name: Baker Jim Dept: 2210 Phone: 6456

SEng: 621 Position: Fuel system leader SEng Name: Morton Jeremy Dept: 2353 Phone: 5796

MRD: F001 Type: LR

Drawing Number: DPM6211571 Drawing Name: Feed boost jet pump Iss: 18

Part Number: DPM6211571-501 Part Name: Feed boost jet pump

Weight (lb): 1.049 Material:

Width (in): 5.432 Length (in): 14.365 Height (in): 6.374 Diameter (in): Thickness (in):

Part envelope and center of gravity in general aircraft coordinates in inches: BR CG: 17.72 STA CG: 489.45 WL CG: -1.27

From BL: To BL: From STA: To STA: From WL: To WL:

Inst Part Number: DPM6292000-501 Inst Part Name: Fuel system instl. - central tank, LH

System: Fluid Subsystem: Fuel Subsystems: Feed

Assembly

PEng	SEng	DwgNumber	PartNumber	MPO	MRD	Qty	EFrom	ETo	InstPartNumber
5	621	DPM6211571	DPM6211571-501	1	F001	1	1	999	DPM6292000-501
5	621	DPM6211572	DPM6211572-501	1	F001	1	0	0	DPM6292002-501

Component dimensions comparison for unique MRD with different part numbers

MRD	Inst Part Number	Part Number	Type	Width (in)	Length (in)	Height (in)	Diameter (in)	Thick (in)	Material	Weight (lb)
F001	DPM6292000-501	DPM6211571-501	LR	5.432	14.365	6.374				1.049
F001	DPM6292002-501	DPM6211572-501	LR	5.752	14.645	6.754		0.000		1.127

MRD part manufacturing technology

Production Design-to-Cost Evaluation

Tools Design-to-Cost evaluation

Technical data

MRD	Part Number	Ray Part Number	Capac Power (W)	Cooling Type	Heat Diss (W)	Part Attachment	Technical Data Notes
F001	DPM6211571-501		3			4 bolts 1/4"	
F001	DPM6211572-501		2			4 bolts 1/4"	

Component's MRD part selection form

Print date: 26-Feb-99

Component Interface

MRDA	Dwg Number	MRD	Part Number	Part Name	System	Subsystem	Subsystems
F001	DPM6211571	F001J	D38999/16F28S	Receptacle	Electrical	Fuel	Feed
F001	DPM6211571	F001X1	W901B16	Ferrule	Fluid	Fuel	Feed
F001	DPM6211571	F001X2	MS33656-10	Outlet end 5/8"	Fluid	Fuel	Feed
F001	DPM6211571	F001X3	DPM6211571-037	Flapper valve opening	Fluid	Fuel	Feed

Bay and Door

MRD	Bay	Bay Name	From BL	To BL	From STA	To STA	From WL	To WL	Door	Inst	Part Number
F001	140	Sub-zone under floor systems instl	-52.0	52.0	409.0	559.0	0.0	12.0	140-DL		DPM6292000-501
F001	140	Sub-zone under floor systems instl	-52.0	52.0	409.0	559.0	0.0	12.0	140-DL		DPM6292002-501

Reliability

R-End	MRD	Part Number	Reliability Report Number	Reliability Notes
61	F001	DPM6211571-501	7.49E-07 DPM061R001	
61	F001	DPM6211572-501	8.35E-06 DPM061R001	

Maintenance Service

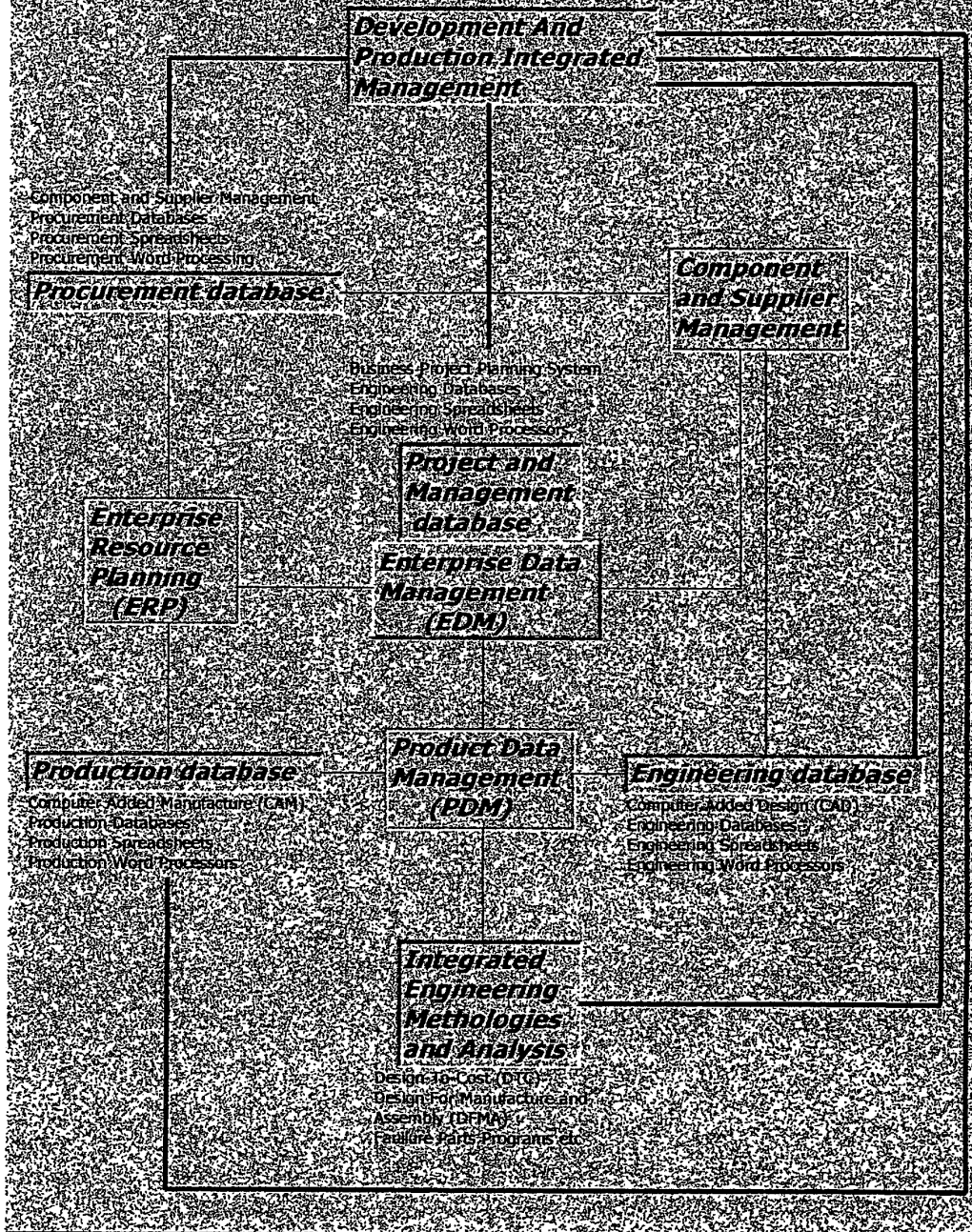
MRD	Part Number	Num	Maintenance Service Description
F001	DPM6211571-501	1	Beware of smokers in vicinity of the unit and check
F001	DPM6211571-501	2	Tighten feed boost jet pump attachment bolts and clean
F001	DPM6211571-501	3	Tighten feed boost jet pump fittings attachment and fix
F001	DPM6211572-501	1	Beware of smokers in vicinity of the unit
F001	DPM6211572-501	2	Tighten feed boost jet pump attachment bolts
F001	DPM6211572-501	3	Tighten feed boost jet pump fittings attachment

Project Status: 1- Permitted for Design and Procurement, 2- Permitted for Design, Repair, and Procurement, 3- Forbidden for Design and Procurement in the project. Selection preference for Design, Manufacture or Procurement is 1.

Component's selection by Design, Manufacturing and Procurement

#MRD	PartNumber	Manufacturer	Vendor	PartNumber	Supplier	Lead time	Price	QTY	Man	Pr	St	Date	
						days	us	621	2	88	1	75	29-Jun-97
F001	DPM6211572-501	Satelite	S4-K-5A	Satelite		30	\$210.90	621	2	88	1	75	29-Jun-97
F001	DPM6211571-501	Smith	J604-K-5A	Smith		40	\$198.96	621	1	88	2	75	19-Jun-97

Development And Production Integrated Management Scheme



Design For Manufacture and Assembly (DFMA) form

PEng 41 Position Project structure engineer PEng Name Carter Colin PEng 2210 Phone 6437
 SEng 121 Position Wing inb'd fuel tank str. engineer SEng Name Dole Tony SEng 2346 Phone 5748

MRD A120B01L Type MP Part Number DPM1200050-001 Part Name Spar 1, LH

Dwg Number DPM1200050 Dwg Name Wing spar 1 Last rev C Date 11-Mar-98

Width (in) 3.25 Length (in) 81.5 Height (in) 14.5 Diameter (in) 0 Thickness (in) 3.25

Weight (lb) 20.548 Material AL7075-T7351

Part envelope and center of gravity in general aircraft coordinates in inch: BLEG 58.00 STAGG 531.50 WLEG 9.80

From BL 58.00 To BL 58.00 From STA 415.00 To STA 497.00 From WL -0.30 To WL 19.50

Inst Part Number DPM1200010-501 Inst Part Name Fwd spar assy, LH

System Structure Subsystem Wing Subsystems Torsion box

Map Dwg Number DPM1100001 Map Dwg Name Wings structure layout Last rev C Date 07-Feb-98

Map System Report DPM044R001 Map Report Name Wing stress substantiation Last rev A Date 29-Jan-98

Assembly

PEng SEng Dwg Number Part Number MPQ MRD Qty Efrom ETo InstPartNumber

4 121 DPM1200050 DPM1200050-001 1 A120B01 1 1 999 DPM1200010-501

MRD critical points

MRD part manufacturing technology

MRD Part number Technology The He Six Pre-treatment Finish

A120B01L DPM1200050-001 5 axis Chromic acid anodize Integral fuel tank coating

Design consideration

MRD Part Number Item Design Criteria Inst Report Number

A120B01L DPM1200050-001 1 Spar 1, LH to be jig located DPM121R001

A120B01L DPM1200050-001 2 Spar 1, LH holes to be drilled by proper equipment DPM121R001

A120B01L DPM1200050-001 3 Longitudinal Grain Direction DPM121R001

Production and procurement

Production route card tool subform

Tool Part Number Dwg Number Part Number Part Name Width Length Height MRD BLEG STAGG WLEG

DPM0741150-501 DPM1200050 DPM1200050-001 #Name? 3.41 85.6 15 A120B01L 58.0 531.5 9.4

Production route card subform

MRD Part Number Part Name Operation Time ACost

A120B01L DPM1200050-001 1 Trim and adjust P/N DPM1200050-001 3.091 \$295.75

A120B01L DPM1200050-001 2 Drill P/N DPM1200050-001 0.554 \$53.01

Production route card accessary tools subform

MRD Part Number Inst Part Number Tool Number Tool Function Tool Name

A120B01L DPM1200050-001 DPM1200010-501 CC305 Cutting Tool Cable Cutter

A120B01L DPM1200050-001 DPM1200010-501 HH721 Cutting Tool Hand Hone

A120B01L DPM1200050-001 DPM1200010-501 SP457 Inspection Tool Sine Plate

Production route card process standards subform

Print date: 03-Jul-99

03-14-99

DMA operations

MRE DFMA criteria subform

NRD#	A120B01L	Part Number	DPM1200050-001	Part Name	Spar 1, LH
NRDA	A120BFAL	Inst Part Number	DPM1200010-501		
Function		Minimum Part Criteria	Assembly of necessary items	Envelope	Flat
Min dimension, inch	>=3.0, <3.0 & >=0.35, <0.35	Insertion alpha symmetry	360°	Orientation beta symmetry	180°
Item characteristics causing difficulties		Nest or tangle	Yes	Nest or tangle severely	Yes
				Flexible	Not flexible
Stick together	Sticky	Fragile	Not fragile	Slippery	Not slippery
				Sharp	Sharp
				Bulky/heavy	Heavy
Grasping and manipulating tools	Twewezers	Not needed	Other grasping tools	Not needed	Optical magnifiers
					Not needed
Handing assistance	Two hands	Needed	Two people	Needed	Mechanical handling
					Not needed
Insertion difficulties	View of mating location	Clear view	Access	Easy access	Align or position
					Easy to align
Resistance to insertion	Not significant	Severe insertion difficulties	Not severe	Holding down required	Not required
For large parts: (Applicable prior to insertion)	Not required	Supporting of weight during insertion	Not required		
		Large depth of insertion	Not required		
		Part fetching distance	Within easy reach	Tool fetching distance	10 to 13 feet away

DFMA analysis

Report Number	DPM080R005		Report Name	Long Lead Items (LLI) substantiation		Last Rev	B	Date	07-Aug-97	
Engineer Name	Milton Betty		Position	Production engineer		Dept	3461	Phone	4899	
<p><i>Design To Cost form</i></p>										
Per#	9	Position	Project manufacturing engineer		Per# Name	Truman Larry	Dept	2210	Phone	6442
Send#	80	Position	Production engineering manager		Send# Name	Elton Ted	Dept	3460	Phone	3350
MRD	A120B02E	Type	MP	Part Number	DPM1200060-011		Part Name	Spar 2 extension, LH		
Dwg Number	DPM1200060		Dwg Name	Wing spar 2		Last Rev	A	Date	29-Jan-98	
Width (in)	3.25	Length (in)	35.5	Height (in)	17.1	Diameter (in)	0	Thickness (in)	3.25	
Weight (lb)	7.534		Material	AL7050-T7351						
Part envelope and center of gravity in general aircraft coordinates in inches										
BLCG	48.96	STACG	522.20	WCG	10.20					
from BL	76.00	to BL	76.00	from STA	499.00	to STA	534.50	from WL	1.70	
to WL	18.80									
Inst Part Number	DPM1200010-501		Inst Part Name	Fwd spar assy, LH						
System	Structure		Subsystem	Wing		Subsystem	Torsion box			
Map Dwg Number	DPM1100001		Map Dwg Name	Wings structure layout		Last Rev	C	Date	07-Feb-98	
Map System Report	DPM044R001		Map Report Name	Wing stress substantiation		Last Rev	A	Date	29-Jan-98	
Assembly										
REng	SEng	Dwg Number	Part Number	MRD	MRD	Qty	FFrom	End	Inst Part Number	
4	121	DPM1200060	DPM1200060-011	1	A120B02	1	1	999	DPM1200010-501	
MRD critical path										
REng	MRD	Part Number	Report Number	Damage tolerance and fatigue notes						
46	A120B02E	DPM1200060-011	DPM046R001							
MRD part manufacturing technology										
MRD	Part number	Technology	Objective	Sh Lo	Pre-treatment	Finish				
A120B02E	DPM1200060-011	5 axis			<input checked="" type="checkbox"/>	Chromic acid anodize	Integral fuel tank coating			
Design considerations										
MRD	Part Number	Item	Design Criteria	Inst Report Number						
A120B02E	DPM1200060-011	1	Spar 2 extension, LH to be jig located	DPM121R001						
A120B02E	DPM1200060-011	2	Spar 2 extension, LH holes to be drilled by proper equipment	DPM121R001						
A120B02E	DPM1200060-011	3	Longitudinal Grain Direction	DPM121R001						
Production and procurement										
Production rout card summary										
MRD	Part Number	Operation	Time	Cost						
A120B02E	DPM1200060-011	1 Trim and adjust P/N DPM1200060-011	1.445	\$138.26						
A120B02E	DPM1200060-011	2 Drill P/N DPM1200060-011	2.808	\$268.67						
MRD Design to Cost data										
MRD	A120B02E	Part Number	DPM1200060-011	Part Name	Spar 2 extension, LH		Type	MP		
Length (in)	35.5	Area (sq in)	115.4	Volume (cu in)	1972.9	Group	Machining part	Group code	B	

Report Number: DPM080R005 Report Name: Long Lead Items (LLI) substantiation Last rev: B Date: 07-Aug-97
 Engineer Name: Milton Betty Position: Production engineer Dept: 3461 Phone: 4899

Design-to-Cost form

Print date: 03-Jul-99

Material: Aluminum	Material: A=aluminum plate, B=aluminum extrusion, C=steel plate, D=steel extrusion, E=titanium plate, F=titanium extrusion	Material form code: A
Process symbol: Comb	Process: A=mill, B=turn, C=drill, D=combined	Process code: D
Sizing: A at 0<V<5, B at 5<V<50, C at 50<V<250, D at 250<V<1500, E at V>1500 cu.in	Size: E	Size/code: K
Complexity: 3<=Operations<=6	Operations: 4	Complexity: B
Size/complexity: Size=A-F, Size=B-G, Size=C-H, Size=D-J, Size=E-K	WTG: BADK	

MRB Part Production cost estimation by Design-to-Cost Method

MRB	Part Number	Y	Qty	Work type	Setup time in hrs	Run time in hrs	Manufacture	Hour rate in \$	Cost in \$	Remarks
		P		Group code						
A120B02E	DPM1200060-011	MP	1	BADK	1.39	0.93	Mill Vision	\$60.14	\$139.52	
A120B02E	DPM1200060-011	MP	1	BADK	1.39	0.93	Mill Computer	\$95.68	\$221.98	

DDDET-BT/ELU

DRAWING FORM

02-Jul-99

Drawing Number: **DPM2230050** Drawing Name: **Frame 24 Instl (centre-wing box)** Last revision: **8**
 Type: **DD** Sheets: **3** Format: **J** Date: **13-Apr-97** Update: **24-Feb-98**
 Designer: **Cassani Barbara** Dept: **2344** WBS: **11223**

P.Eng.	S.Eng.	DwgNumber	PartNumber	MPQ	MRD	Qty	Efrom	Eto	InstPartNumber
4	223	DPM2230050	DPM2230050-501	1	AFR248A	1	1	999	DPM2230000-501

Part Number	Part Name	Width mm	Length mm	Height mm	Diap. mm	Thick. mm	Material	Weight mkg	Tare mkg
DPM2230050-501	Frame 24 assy, (centre-wing box stru	25.000	80.000	3.250	0.000			5.098	5.096

Dwg Number	Revision	Discipline	Name	Position	Dept	Phone	Date
DPM2230050	B	Approved	Teflon Mike	Structure group leader	2344	5702	24-Feb-98
DPM2230050	B	Designer	Cassani Barbara	Structure design engineer	2344	2067	24-Feb-98
DPM2230050	B	Maintenance	Balrston James	Maintenance engineer	2384	3218	24-Feb-98
DPM2230050	B	Production	Jones David	Production centre fus.str.engineer	3461	2341	24-Feb-98
DPM2230050	B	Project	Carter Colin	Project structure engineer	2210	6437	24-Feb-98
DPM2230050	B	Stress	Destiny David	Stress engineer	2362	6222	24-Feb-98
DPM2230050	B	Weight	Flamingo Lee	Weight engineer	2368	6983	24-Feb-98

FAR regulations

02/30/99

FAR	25.0000.A	Amendment	
FAR Description	Subpart A - General		
FAR	25.0001	Amendment	
FAR Description	Applicability		
FAR	25.0002	Amendment	
FAR Description	Special retroactive requirements		
FAR	25.002 .B	Amendment	
FAR Description	Subpart B - Flight		
FAR	25.0020	Amendment	
FAR Description	General		
FAR	25.0021	Amendment	
FAR Description	Proof of compliance		
FAR	25.0023	Amendment	
FAR Description	Load distribution limits		
FAR	25.0025	Amendment	
FAR Description	Weight limits		
FAR	25.0027	Amendment	
FAR Description	Center of gravity limits		
FAR	25.0029	Amendment	
FAR Description	Empty weight and corresponding center of gravity		
FAR	25.0031	Amendment	
FAR Description	Removable ballast		
FAR	25.0033	Amendment	
FAR Description	Propeller speed and pitch limits		
FAR	25.0100	Amendment	
FAR Description	Performance		
FAR	25.0101	Amendment	
FAR Description	General		
FAR	25.0103	Amendment	
FAR Description	Stalling speed		
FAR	25.0105	Amendment	
FAR Description	Takeoff		
FAR	25.0107	Amendment	
FAR Description	Takeoff speed		
FAR	25.0109	Amendment	
FAR Description	Accelerate-stop distance		
FAR	25.0111	Amendment	
FAR Description	Takeoff path		
FAR	25.0113	Amendment	
FAR Description	Takeoff distance and takeoff run		

DOCKET BL447109

Report Number: DPM765R001 Report Name: Electromagnetic compatibility substantiation Last revision: B Date: 27-Feb-98

GROUNDING FORM

Print date: 02-Jul-99

PEng: 6 Position: Project electrical engineer Eng Name: Bush Gary Dept: 2210 Phone: 6448
 GEng: 765 Position: EMC & lightning group leader SEng Name: Hill Elisabeth Dept: 2373 Phone: 9205
 Position: EMC & lightning engineer Eng Name: Allard Chris Dept: 2373 Phone: 3185

GMRD: GR0006

Grounding type: Jumper Length in inch: 4.52 Resistance in ohm: 0.017

Grounding basic consideration: Jumper from unit C203 attach to main frame A330B09L

System: C203 Type: LR Part Number: DPM7430020-501 Part Name: Trim actuator

Dwg Number: DPM7430020 Inst Part Number: DPM4230000-501

Part center of gravity and envelope in general aircraft coordinates in inches: BCG: 53.94 STAG: 897.67 WLCG: 173.07

From BL: From BL: From STA: From STA: From WL: From WL:

System: Electrical Subsystem: Flight control Subsystem: Stabilizer horizontal

Map Dwg Number: DPM7132001

Map System Report: DPM743R003

System: Part Assembly

PEng	SEng	Dwg Number	Part Number	MRQ	MRD	Qty	Efrom	Etto	Inst Part Number
6	743	DPM7430020	DPM7430020-501	1	C203	1	1	999	DPM4230000-501
6	743	DPM7430021	DPM7430021-501	1	C203	1	0	0	DPM4230002-501

System: A330B09L Type: SP Part Number: DPM3300090-001 Part Name: Spar 9, LH

Dwg Number: DPM3300090 Inst Part Number: DPM3300000-501

Part center of gravity and envelope in general aircraft coordinates in inches: BCG: 59.20 STAG: 882.50 WLCG: 185.00

From BL: 68.80 From BL: 49.60 From STA: 870.80 From STA: 894.20 From WL: 182.88 From WL: 187.12

System: Structure Subsystem: Empennage Subsystem: Horizontal stabilizer

Map Dwg Number: DPM3000001

Map Structure Report: DPM045R001

Assembly

PEng	SEng	Dwg Number	Part Number	MRQ	MRD	Qty	Efrom	Etto	Inst Part Number
4	330	DPM3300090	DPM3300090-001	1	A330B09	1	1	999	DPM3300000-501

MRD Bay subform

MRD	MRD Part Number	Bay	Bay Name	From BL in	To BL in	From STA in	To STA in	From WL in	To WL in	Notes
C203	DPM7430020-501	332	Left elevator	10.0	100.0	802.0	905.0	188.0	198.0	
C203	DPM7430021-501	332	Left elevator	10.0	100.0	802.0	905.0	188.0	198.0	
C203	DPM7430020-501	332	Left elevator	10.0	100.0	802.0	905.0	188.0	198.0	
C203	DPM7430021-501	332	Left elevator	10.0	100.0	802.0	905.0	188.0	198.0	

MRD Door subform

Report Number: DPM062R003 Report Name: Line Replacement Units (LRU) substantiation
 Engineer Name: Tornado Mary Position: LRU engineer
 Dept: 2383 Phone: 3025
 Date: 30-Oct-98
 Print Date: 02-Jul-99

Line Replacement Units (LRU) form

PEng: 2 Position: Project design assist. manager PEng Name: Ford John Dept: 2210 Phone: 6452
 SEng: 743 Position: LRU group leader SEng Name: Rubin Robert Dept: 2384 Phone: 3014

MRD: C103 Type: LR Part Number: DPM7430010-501 Part Name: Trim actuator

Dwg Number: DPM7430010 Dwg Name: Trim actuator Cast rev: A Date: 19-Apr-98

Width (in): 3.364 Length (in): 11.423 Height (in): 3.364 Diameter (in): 3.364 Thickness (in):

Weight (lb): 1.324 Material:

Part envelope and center of gravity in general aircraft coordinates in inches: BCG: 30.29 STAG: 389.05 WCG: 10.82

From BL: To BL: From STA: To STA: From WL: To WL:

Inst Part Number: DPM4210000-501 Inst Part Name: Aileron Control system in fus., LH

System: Electrical Subsystem: Flight control Subsystems: Aileron

Map Dwg Number: DPM7131001 Map Dwg Name: Aileron System wire diagram Cast rev: B Date: 03-Feb-98

Map System Report: DPM743R001 Map Report Name: Aileron electrical system operation susta Last rev: C Date: 05-Dec-97

Assembly:

REng	SEng	Dwg Number	Part Number	MPQ	MRD	Qty	EFrom	ETo	Inst Part Number
6	743	DPM7430010	DPM7430010-501	1	C103	1	1	999	DPM4210000-501
6	743	DPM7430011	DPM7430011-501	1	C103	1	0	0	DPM4210002-501

FAR regulations:

MRD	Part Number	FAR	FAR Description
C103	DPM7430010-501	25.1351	General
C103	DPM7430010-501	25.1353	Electrical equipment and installations
C103	DPM7430011-501	25.1351	General
C103	DPM7430011-501	25.1353	Electrical equipment and installations

Design consideration:

MRD	Part Number	Item	Design Criteria	Inst Report Number
C103	DPM7430010-501	1	Free access should be provided for a trim actuator C103	DPM743R002
C103	DPM7430010-501	2	Trim actuator to be checked before instl	DPM743R002
C103	DPM7430011-501	1	Free access should be provided for a trim actuator C103	DPM743R002
C103	DPM7430011-501	2	Trim actuator to be checked before instl	DPM743R002

Technical data:

MRD	Part Number	Bay	Part Number	Capact/Power	Cooling Type	Heat Diss	Part Attachment	Technical Data Notes
C103	DPM7430011-501			145			3/8" axle & 3/8" rod end	
C103	DPM7430010-501			150			3/8" axle & 3/8" rod end	

Bay and Door:

MRD	Part Number	Bay	Bay Name	From BL	To BL	From STA	To STA	From WL	To WL	Door	Door Part Number
C103	DPM7430010-501	131	Under floor systems instl LHS	0.0	52.0	280.0	409.0	0.0	12.0	131-CZ	DPM2621101-03
C103	DPM7430011-501	131	Under floor systems instl LHS	0.0	52.0	280.0	409.0	0.0	12.0	131-CZ	DPM2621101-03

Report Number: DPM080R005 Report Name: Long Lead Items (LLI) substantiation Last rev: B Date: 07-Aug-97
 Engineer Name: Milton Betty Position: Production engineer Dept: 3461 Phone: 4899

Long Lead Item (LLI) form

Print date: 02-Jul-99

Peng: 9 Position: Project manufacturing engineer Eng Name: Truman Larry Dept: 2210 Phone: 6442
 SEng: 80 Position: Production engineering manager SEng Name: Elton Ted Dept: 3460 Phone: 3350

MRD: A120B02E Type: MP Part Number: DPM1200060-011 Part Name: Spar 2 extension, LH

Dwg Number: DPM1200060 Dwg Name: Wing spar 2 Last rev: A Date: 29-Jan-98

Width (in): 3.25 Length (in): 35.5 Height (in): 17.1 Diameter (in): 0 Thickness (in): 3.25

Weight (lb): 7.534 Material: AL7050-T7351

Part envelope and center of gravity in general aircraft coordinates in inches: BCG: 48.96 STAGC: 522.20 WCG: 10.20

From BL: 76.00 To BL: 76.00 From STA: 499.00 To STA: 534.50 From WL: 1.70 To WL: 18.80

Inst Part Number: DPM1200010-501 Inst Part Name: Fwd spar assy, LH

System: Structure Subsystem: Wing Subsystems: Torsion box

Map Dwg Number: DPM1100001 Map Dwg Name: Wings structure layout Last rev: C Date: 07-Feb-98

Map System Report: DPM044R001 Map Report Name: Wing stress substantiation Last rev: A Date: 29-Jan-98

Assembly:

Peng	SEng	Dwg Number	Part Number	MRO	MRD	Qty	EFrom	ETo	Inst Part Number
4	121	DPM1200060	DPM1200060-011	1	A120B02	1	1	999	DPM1200010-501

MRD critical part:

MRD: 46 MRD: A120B02E Part Number: DPM1200060-011 Report Number: DPM046R001

MRD part manufacturing technology:

MRD	Part Number	Technology	Chemical	Heat	Shrink	Pretreatment	Finish
A120B02E	DPM1200060-011	5 axis	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Chromic acid anodize	Integral fuel tank coating

FAR regulations:

MRD	Part Number	FAR	FAR Description
A120B02E	DPM1200060-011	25.0305	Strength and deformation
A120B02E	DPM1200060-011	25.0605	Fabrication methods

Design consideration:

MRD	Part Number	Item	Design Criteria	Inst Report Number
A120B02E	DPM1200060-011	1	Spar 2 extension, LH to be jig located	DPM121R001
A120B02E	DPM1200060-011	2	Spar 2 extension, LH holes to be drilled by proper equipment	DPM121R001
A120B02E	DPM1200060-011	3	Longitudinal Grain Direction	DPM121R001

Bay and Door:

Production and procurement

Production procurement summary:

MRD	Part Number	Qty	Operation	Time	Cost
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Report Number: DPM080R005 Report Name: Long Lead Items (LLI) substantiation Last rev: B Date: 07-Aug-97
 Engineer Name: Milton Betty Position: Production engineer Dept: 3461 Phone: 4899

Long Lead Item (LLI) form

Print date: 02-Jul-99

A120B02E DPM1200060-011	1	Trim and adjust P/N DPM1200060-011	1.445	\$138.26
A120B02E DPM1200060-011	2	Drill P/N DPM1200060-011	2.808	\$268.67

Production rout card tools subform

Tool Part Number	Dwg Number	Part Number	Part Name	Width	Length	Height	MRD	BLDG	STAGE	WLOC
DPM0741160-503	DPM1200060	DPM1200060-011	#Name?	3.41	37.3	18	A120B02E	49.0	522.2	10.2

Production rout card accessory tools subform

MRD	Part Number	Inst Part Number	Tool Number	Tool Function	Tool Name
A120B02E	DPM1200060-011	DPM1200010-501	CH947	Cutting Tool	Chisel
A120B02E	DPM1200060-011	DPM1200010-501	DB345	Cutting Tool	Deburring
A120B02E	DPM1200060-011	DPM1200010-501	SG537	Inspection Tool	Strain Gauge

Production rout card Process Standards subform

MRD	Part Number	Inst Part Number	PS Number	Subject	Title
A120B02E	DPM1200060-011	DPM1200010-501	PS3114	Protective Finish	Integral Fuel Tank Coating
A120B02E	DPM1200060-011	DPM1200010-501	PS3661	Chemical Treatment	Chromic Acid Anodizing

Orders subform

MRD	Part Number	Manufacturer	Vendor Number	Qty	Alt Part Number	Alt Part No. to	Order Date
81	A120B02E DPM1200060-011	Mill Computer		1	4	DPM1200010-501	1 4 07-Jan-97

Requirements subform

Invoice Item	MRD	Part Number	Manufacturer	Supplier	Qty	Unit price	Total price	Supply Date
41436	1	A120B02E DPM1200060-011	Mill Computer	Mill Computer	4	\$1,428.97	\$5,715.90	12-Oct-97

Advanced Material Order (AMO) data

MRD	Part Number	Description	Weight	Date	Rep Number
76	AMPA2041 A120B02E DPM1200060-011	Plate AL7050-T7351, t= 3.25 inch, 24 x 72 inch	562.9	02-Feb-97	DPM080R00

Integrated Engineering Methodologies and Analysis

MRD Design To Cost data

MRD	A120B02E	Part Number	DPM1200060-011	Part Name	Spar 2 extension , LH	Type	MP							
Length	inch	35.5	Area	Sq.in	115.4	Volume	Cu.in	1972.9	Group	Machining part	Group code	B		
Material	Aluminum	Material form	A=aluminum plate, B=aluminum extrusion, C=steel plate, D=steel extrusion, E=titanium plate, F=titanium extrusion						Material	A				
Process symbol	Comb	Process	A=mill, B=turn, C=drill, D=combined						Process	D				
Size	A at 0<V<5, B at 5<V<50, C at 50<V<250, D at 250<V<1500, E at V>1500 cu.in										Size	E	Size/code	K
Complexity	3<=Operations<=6			Operations	4	Complexity	B							
Size/complexity	Size=A-F, Size=B-G, Size=C-H, Size=D-J, Size=E-K										W/ISO	BADK		

MRD Part Production Cost estimation by Design To Cost Method

MRD	Part Number	Work	Setup	Part	Manuf	Hour	Cost	Remarks
		Type	Time in	Time		rate in \$	in \$	
		Group	hrs	in hrs				
		Code						
A120B02E	DPM1200060-011	MP	1	BADK	1.39	0.93	Mill Vision	\$60.14 \$139.52
A120B02E	DPM1200060-011	MP	1	BADK	1.39	0.93	Mill Computer	\$95.68 \$221.98

Report Number: DPM080R005 Report Name: Long Lead Items (LLI) substantiation Last rev: B Date: 07-Aug-97
 Engineer Name: Milton Betty Position: Production engineer Dept: 3461 Phone: 4899

Long Lead Item (LLI) form

Print date: 02-Jul-99

MRD Design to Cost (DDC) data

MRD	A120B02E	Part Number	DPM1200060-011	Part Name	Spar 2 extension, LH	Type	MP
Jig Part Number	DPM0741160-503	Jig Part Name	Jig, Spar 2 extension, LH	Jig type	JA		
Length, inch	37.3	Area, sq. in.	127.1	Volume, cu. in.	2287.6	Group	Jig Assy
Material		Material		Material		Material	A
Process symbol	BoReam	Process	A=bore/ream, B=bore/ream/mill, C=mill Assy	Proc code	A		
Size	A at 0<L<24, B at 24<L<48, C at 48<L<96, D at 96<L<120, E at L>120 in					Size	B
Complexity	3<=Operations<=6					Operations	6
Size/complexity	Size=A-F, Size=B-G, Size=C-H, Size=D-J, Size=E-K					WTC	EAAG

MRD Tool Production cost estimation by Design to Cost Method

MRD	Part Number	Tool Part Number	Work Setup	Run	Time	Rate	Cost	Remarks
			Time	Time	in hrs	in hrs		
A120B02E	DPM1200060-011	DPM0741160-503	JA	1	EAAG	1.03	0.59	Mill Computer
							\$95.68	\$155.00

CONTROL: 1. Selection, 2. Rate, 3. Form, 4. Approved for production and procurement, 5. For Reprint only, 6. Forbidden

MRD	Part Number	Manufacturer	Vendor Part Number	Supplier	Lead Price	Des	Pr	Man	Pr	Pr	Pr	Pr	Pr	Pr	Pr	Date
					Time, hrs	Time, hrs	Time, hrs	Time, hrs	Time, hrs	Time, hrs	Time, hrs	Time, hrs	Time, hrs	Time, hrs	Time, hrs	
A120B02E	DPM1200060-011	Mill Vision		Mill Vision	40	1,400.39	121	1	81	2	75	1	9	3		07-Jan-97
A120B02E	DPM1200060-011	Mill Computer		Mill Computer	30	1,428.97	121	1	81	1	75	2	9	1		07-Jan-97

Manufacturers form

03/01/99

Manufacturer	Aerodata				
Country	USA	Address	New York		
		Phone	26351723	Facsimile	25119402
				Hour rate in \$	\$85.66
Manufacturer	Aerofridge				
Country	USA	Address	Minneapolis		
		Phone	56478592	Facsimile	55246271
				Hour rate in \$	\$80.38
Manufacturer	Aerosewage				
Country	USA	Address	Pittsburg		
		Phone	86278941	Facsimile	85046620
				Hour rate in \$	\$95.63
Manufacturer	Aerowater				
Country	USA	Address	Missoula		
		Phone	32947463	Facsimile	31715142
				Hour rate in \$	\$94.28
Manufacturer	Air Instrument				
Country	Israel	Address	Natanla		
		Phone	87546567	Facsimile	86314246
				Hour rate in \$	\$48.70
Manufacturer	Air Transport				
Country	England	Address	Dover		
		Phone	59876535	Facsimile	58644214
				Hour rate in \$	\$48.24
Manufacturer	Aircondition				
Country	USA	Address	Houston		
		Phone	47868394	Facsimile	46636073
				Hour rate in \$	\$78.63
Manufacturer	Assembly				
Country	Israel	Address	Ashdod		
		Phone	36475652	Facsimile	32523153
				Hour rate in \$	\$62.45
Manufacturer	Avia Computer				
Country	France	Address	Rue Luis 235, Lion		
		Phone	48859603	Facsimile	47627282
				Hour rate in \$	\$51.22
Manufacturer	Bearing Computer				
Country	Canada	Address	Vinnipeg		
		Phone	18748592	Facsimile	17516271
				Hour rate in \$	\$56.37
Manufacturer	Bend Scope				
Country	Canada	Address	Toronto		
		Phone	64635271	Facsimile	26364645
				Hour rate in \$	\$86.49
Manufacturer	Bundles				
Country	England	Address	Manchester		
		Phone	32535527	Facsimile	33774859
				Hour rate in \$	\$59.71
Manufacturer	Channel				
Country	Canada	Address	Kingston		
		Phone	37252527	Facsimile	36020206
				Hour rate in \$	\$60.92
Manufacturer	Collins				
Country	USA	Address	Chicago		

MRD AMO code form

03-01-95

A	Code A	Airstructure
B	Code B	Dwg cascade
C	Code C	Assembly
D	Code D	Bottom
E	Code E	
F	Code F	
Notes		
A	Code A	Airstructure
B	Code B	Dwg cascade
C	Code C	Assembly
D	Code D	Left
E	Code E	
F	Code F	
Notes		
A	Code A	Airstructure
B	Code B	Dwg cascade
C	Code C	Assembly
D	Code D	Right
E	Code E	
F	Code F	
Notes		
A	Code A	Airstructure
B	Code B	Dwg cascade
C	Code C	Assembly
D	Code D	Top
E	Code E	
F	Code F	
Notes		
A	Code A	Airstructure
B	Code B	Dwg cascade
C	Code C	Beam
D	Code D	Beam number
E	Code E	Panel
F	Code F	
Notes		
A	Code A	Airstructure
B	Code B	Dwg cascade
C	Code C	Beam
D	Code D	Beam number
E	Code E	Bottom
F	Code F	
Notes		

50173718-123000

Rep Number: DPM080R001 Report Name: AMO (Advanced Material Order) Last revision: B Date: 25-Oct-97

MRD AMO form

Print date: 03-Jul-99

Ego: 9 Person Name: Truman Larry Position: Project manufacturing engineer Dept: 2210 Phone: 6442
 Meng: 76 Meng Name: Merchant Stuart Position: Machining parts production engineer Dept: 3463 Phone: 8457

AMO: AMPA9532 Description: Plate AL7075-T7351, t= 3.25 inch, 24 x 72 inch

Form: Plate Type: MP Material: AL7075-T7351 Thickness in inches: 3.250

Width in inches: 24.0 Length in inches: 72.0 Diameter in inches: 0.000 Weight in lb: 562.9

Name: Swayze Patrick Position: Production engineer Dept: 3461 Phone: 4856

Remark: Filing form date: 16-Jan-97

Assembly

AMO	Peng	Strg	Dwg Number	Part Number	MRD parts	MRD	Qty	Effect from	Effect to	Part Number	MRDA
AMPA9532	4	122	DPM1200160	DPM1200160-001	1	A120B12L	1	1	999	DPM1200010-501	A120BFAL
AMPA9532	4	122	DPM1200160	DPM1200160-002	1	A120B12R	1	1	999	DPM1200010-502	A120BFAR

Parts

MRD	Part Number	Part Name	Qty	Width in inches	Length in inches	Height in inches	Diameter in inches	Thickness in inches	Material	Weight in lbs
A120B12L	DPM1200160-001	Spar 12, LH	MP	3.25	54.00	9.00	0.000	3.250	AL7075-T7351	10.042
A120B12R	DPM1200160-002	Spar 12, RH	MP	3.25	54.00	9.00	0.000	3.250	AL7075-T7351	10.042

MRD AMO design criteria

AMO	MRD	Part Number	Item	Design Criteria	Report Number
AMPA9532	A120B12L	DPM1200160-001	1	Spar 12, LH to be jig located	DPM122R001
AMPA9532	A120B12L	DPM1200160-001	2	Spar 12, LH holes to be drilled by proper equipment	DPM122R001
AMPA9532	A120B12L	DPM1200160-001	3	Longitudinal Grain Direction	DPM122R001
AMPA9532	A120B12R	DPM1200160-002	1	Spar 12, RH to be jig located	DPM122R001
AMPA9532	A120B12R	DPM1200160-002	2	Spar 12, RH holes to be drilled by proper equipment	DPM122R001
AMPA9532	A120B12R	DPM1200160-002	3	Longitudinal Grain Direction	DPM122R001

MRD Technology

AMO	MRD	Part Number	Technology	Ch. Re. Sh. Lo. em. al. no. Mill. H. P. E. at. T. ad.	Treatment	Finish
AMPA9532	A120B12L	DPM1200160-001	5 axis	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/>	Chromic acid anodize	Integral fuel tank coating
AMPA9532	A120B12R	DPM1200160-002	5 axis	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/>	Chromic acid anodize	Integral fuel tank coating

Report Number: DPM046R001 Report Name: Fatigue substantiation Last rev: C Date: 25-Apr-98
 Engineer Name: Southend Mary Position: Stress engineer Draw: 2366 Phone: 3166

MRD critical parts form

Rev: 4 Position: Project structure engineer PEng Name: Carter Colin Des: 2210 Phone: 6437
 Seng: 121 Position: Fatigue & damage tolerance group leader Seng Name: Barnet Mark Des: 2366 Phone: 6215

MRD: A120B06L Type: MP Part Number: DPM1200100-001 Part Name: Spar 6, LH

Dwg Number: DPM1200100 Dwg Name: Wing spar 6 Last rev: B Date: 03-Apr-98

Width (in): 3.25 Length (in): 59.8 Height (in): 12 Diameter (in): 0 Thickness (in): 3.25

Weight (lb): 13.281 Material: AL7075-T7351

Part Envelope and Center of Gravity in General aircraft coordinates in inches: BLEG: 148.00 STAGE: 546.00 WLCG: 12.80

from BL: 148.00 to BL: 148.00 from STA: 450.00 to STA: 510.00 from WL: 9.70 to WL: 16.00

Inst Part Number: DPM1200010-501 Inst Part Name: Fwd spar assy, LH

System: Structure Subsystem: Wing Subsystems: Torsion box

Map Dwg Number: DPM1100001 Map Dwg Name: Wings structure layout Last rev: C Date: 07-Feb-98

Map System Report: DPM044R001 Map Report Name: Wing stress substantiation Last rev: A Date: 29-Jan-98

Critical parts notes:

Assembly:

RENG	SENG	DWG NUMBER	PART NUMBER	MPC	MRD	QTY	FROM	TO	INST PART NUMBER
4	121	DPM1200100	DPM1200100-001	1	A120B06	1	1	999	DPM1200010-501

Weight summary:

WENG	MRD	PART NUMBER	TARGET WEIGHT (lb)	WEIGHT REPORT	WEIGHT ENGINEER	REMARKS
48	A120B06L	DPM1200100-001	13.279	DPM048R001		

Dynamics loads - vibration subform:

VENG	MRD	PART NUMBER	FREQ	FREQ	AMPL	ACCEL	REPORT NUMBER	REMARKS
47	A120B06L	DPM1200100-001	5	2000	0.036	2.0g	DPM047R001	

MRD part manufacturing technology:

MRD	PART NUMBER	TECHNOLOGY	CHEMICAL	PRETREATMENT	FINISH
A120B06L	DPM1200100-001	5 axis	<input type="checkbox"/>	<input checked="" type="checkbox"/> Chromic acid anodize	<input checked="" type="checkbox"/> Integral fuel tank coating

FAR regulators:

MRD	PART NUMBER	FAR	FAR DESCRIPTION
A120B06L	DPM1200100-001	25.0305	Strength and deformation
A120B06L	DPM1200100-001	25.0623	Bearing factors

Design considerations:

MRD	PART NUMBER	ITEM	DESIGN CRITERIA	INST REPORT NUMBER
A120B06L	DPM1200100-001	1	Spar 6, LH to be jig located	DPM121R001
A120B06L	DPM1200100-001	2	Spar 6, LH holes to be drilled by proper equipment	DPM121R001
A120B06L	DPM1200100-001	3	Longitudinal Grain Direction	DPM121R001

Day and Date: Page 12 of 185

Report Number: DPM442R001 Report Name: Vertical stabilizer flight control system operation Date: 25-May-98

MRD part design criteria form

Print Date: 03-Jul-99

Rev: 5 Position: Project mechanical engineer Design Name: Baker Jim Dept: 2210 Phone: 6456

Seq: 423 Position: Fus. primary controls engineer Design Name: Dogbert Charles Dept: 2351 Phone: 5781

MRD: C336 Type: MP

Drawing Number: DPM4230005 Drawing Name: Belcrank Res: B

Part Number: DPM4230005-016 Part Name: Belcrank

Width (in): 0.89 Length (in): 8.209 Height (in): 1.117 Diameter (in): Thickness (in): 0

Weight (lb): 0.093 Material: Titanium

Part center of gravity in general aircraft coordinates: B CG (in): -9.57 STA CG (in): 673.56 Wings (in): 92.78

Part envelope in inches in general aircraft coordinates in inches

From BL: To BL: From STA: To STA: From WL: To WL:

Inst Part Number: DPM4230080-502 Inst Part Name: Belcrank instl on sta 243.46, RH

System: Mechanical Subsystem: Flight control Subsystem: Rudder

Map Drawing Number: DPM4230001 Map Drawing Name: Rudder control map Res: B Date: 10-Apr-98

Map System Report: DPM442R001 Map Report Name: Vertical stabilizer flight control system op Res: D Date: 25-May-98

Author: Ostguthorpe Dick Position: Mechanical design engineer Dept: 2351 Phone: 3079

PAR requirements:

MRD	Part Number	YEAR	DESCRIPTION
C336	DPM4230005-016	25.0671	General
C336	DPM4230005-016	25.0693	Joints

Part design criteria subform

MRD	Part Number	Item	Design Criteria	Inst Report Number
C336	DPM4230005-016	1	Item C336 to be jig located	DPM442R001
C336	DPM4230005-016	2	Item C336 holes to be drilled by proper equipment	DPM442R001
C336	DPM4230005-016	3	Long Transverse Grain Direction	DPM442R001

Report Number: DPM047R001 Report Name: Loads substantiation Last revision: A Date: 23-Jul-98

MRD part dynamic loads form

Print date: 03-Jul-99

Part: 5 Position: Project mechanical engineer Part Name: Baker Jim Desk: 2210 Phone: 6456

Part: 47 Position: Dynamic loads group leader Part Name: Turner Tim Desk: 2367 Phone: 6219

MRD: F033 Part Number: DPM6221552-501 Part Name: Transfer jet pump Type: LR

Dwg Number: DPM6221552 Dwg Name: Transfer jet pump East view: A Date: 19-Mar-98

Width (in): 8.367 Length (in): 13.742 Height (in): 7.486 Diameter (in): Thickness (in):

Weight (lb): 0.794 Material:

Part envelope and center of gravity in general aircraft coordinates in inches: BL CG: 1.97 STA CG: 428.35 WL CG: -6.29

From BL: To BL: From STA: To STA: From WL: To WL:

Base Part Number: DPM6292000-501 Base Part Name: Fuel system inst. - central tank, LH

System: Fluid Subsystem: Fuel Subsystems: Transfer

Map Drawing Number: DPM6200001 Dwg Name: Fuel system map Last rev: B Date: 08-Oct-97

Map System Name: DPM620R001 Report Name: Fuel system operation substantiation Last rev: A Date: 22-May-98

FAR regulations:

MRD	Part Number	FAR	FAR Description
F033	DPM6221542-501	25.0991	Fuel pumps
F033	DPM6221542-501	25.0993	Fuel system lines and fittings
F033	DPM6221552-501	25.0991	Fuel pumps
F033	DPM6221552-501	25.0993	Fuel system lines and fittings

Assembly

Part	SEnd	Dwg Number	Part Number	MPQ	MRD	Qty	EFrom	ETo	LastPartNumber
5	622	DPM6221542	DPM6221542-501	1	F033	1	0	0	DPM6292002-501
5	622	DPM6221552	DPM6221552-501	1	F033	1	1	999	DPM6292000-501

Technical data

MRD	Part Number	Part Name	Capacity	Power	Cooling Type	Heat Dissipat	Part Attachment	Technical Data
F033	DPM6221552-501			5			4 bolts 1/4"	
F033	DPM6221542-501			4			4 bolts 1/4"	

Material data

MRD	MRD	Part Number	Part Name	Energy	Power	Amplitude	Report Number	Remarks
47	F033	DPM6221542-501	5	2000	0.023	3.9g	DPM047R001	
47	F033	DPM6221552-501	5	2000	0.023	3.9g	DPM047R001	

Report Number: DPM061R004 Report Name: Failure parts investigation Rev: B Date: #Name?

MRD failure part form Part date: 03-Jul-99

Person: 5 Position: Project mechanical engineer Person Name: Baker Jim Dept: 2210 Phone: 6556

SB no: 61 Position: Reliability group leader SB no Name: Ford Betty Dept: 2383 Phone: 3025

MRD: C101 Type: LR

Drawing Number: DPM4210020 Drawing Name: Autopilot servoactuator B

Part Number: DPM4210020-501 Part Name: Autopilot servoactuator

Width (in): 2.486 Length (in): 7.593 Hole (in): 2.486 Diameter (in): 2.486 Thickness (in):

Weight (lb): 5.352 Material:

Part envelope and center of gravity in general aircraft coordinates in inches: BL CG: 33.47 STA CG: 401.65 WL CG: 7.53

Front ID: Front ID: Front ID: Front ID: Front ID: Front ID: Front ID: Front ID:

Inst Part Number: DPM4210000-501 Inst Part Name: Aileron Control system in fus., LH

System: Mechanical Subsystem: Flight control Subsystem: Aileron

Map Dwg Number: DPM4210001 Dwg Name: Aileron control map Rev: A Date: 23-Jun-98

Map System Region: DPM411R001 Report Name: Aileron flight control system operation Rev: A Date: 15-Apr-98

MRD Summary:

MRD	Part Number	THR	FAR Description
C101	DPM4210020-501	25.0671	General
C101	DPM4210020-501	25.0685	Control system details
C101	DPM4210021-501	25.0671	General
C101	DPM4210021-501	25.0685	Control system details

Assembly:

PEng	SEng	Dwg Number	Part Number	MPG	MRD	Qty	E from	E to	Inst Part Number
5	421	DPM4210020	DPM4210020-501	1	C101	1	1	999	DPM4210000-501
5	421	DPM4210021	DPM4210021-501	1	C101	1	0	0	DPM4210002-501

Technical Data:

MRD	Part Number	Inst Part Number	Capact Power	Cooling Type	Heat	Part Attachment	Technical Data
			Typical in-wt		Disc wt		Notes
C101	DPM4210021-501					3/8" axle & 3/8" rod end	
C101	DPM4210020-501					3/8" axle & 3/8" rod end	

Reliability:

Rev	MRD	Part Number	Reliability Report Number	Reliability Notes
61	C101	DPM4210020-501	2.68E-07 DPM061R001	
61	C101	DPM4210021-501	4.68E-06 DPM061R001	

Place of: Flight test maneuver Failure Date: 05-May-98 Treatment: 15-May-98

Failure Description: Impossible to actuate

Treatment: Fixed as noted in process standard

Page 1 of 2

Report Number: DPM066R001 Report Name: Flight test evaluation and substantiation Rev: C Date: 25-Nov-98

MRD Flight test form

Print date: 03-Jul-99

Per# 11 Position: Project flight test engineer Per# Name: Chapman Ronald Dept: 2210 Phone: 6444
 TE# 66 Position: Flight test group leader TE# Name: Gunter Felix Dept: 2391 Phone: 3279

MRD: ZFH06206

Type: TA

Drawing Number: DPM0666162 Drawing Name: Flight test tube assy Rev: A Date: 08-Apr-98

Part Number: DPM0666162-501 Part Name: Flight test tube assy

Width (in): 0 Length (in): 30 Height (in): 0 Diameter (in): 0.375 Thickness (in): 0

Weight (lb): 0.096 Material: Titanium

Part envelope and center of gravity in general aircraft coordinates in inches: BL CG: -32.75 STA CG: 648.50 WL CG: 55.50

Front BL: -37.0 To BL: -28.5 from STA: 646 To STA: 651.0 from WL: 64.0 To WL: 47.0

Inst Part Number: DPM0666100-501 Inst Part Name: Flight test hydraulic system assy

System: Flight test Subsystem: Hydraulic Subsystem: Thrust reverser

Map Drawing Number: DPM0660001 Map Dwg Name: Flight test map Rev: C Date: 16-Jan-99

Map System Report: DPM066R002 Map Report Name: Flight test units instl requirements Rev: C Date: 31-Aug-98

FAO regulations:

MRD	Part Number	FAR	FAR Description
ZFH06206	DPM0666162-501	25.0021	Proof of compliance
ZFH06206	DPM0666162-501	25.1435	Hydraulic systems

MRD Flight Test replacement

MRD	Dwg Number	Part Number	Part Name	MRD	Qty	E From	E To	Inst Part Number
ZFH06206	DPM6131106	DPM6131106-501	Tube assy	HTRD0406	1	1	999	DPM6193400-501

Flight Test Date: 20-Mar-99

Flight Test Description: Perform flight test of ZFH06206 (instead of HTRD0406, DPM6131106-501) as requested by flight test report requirements

Section:

PE#	SE#	Dwg Number	Part Number	MRD	MRD	Qty	E From	E To	Inst Part Number
11	66	DPM0666162	DPM0666162-501	1	ZFH0620	1	2	2	DPM0666100-501

Bay and Door

MRD	Part Number	Bay	Bay Name	Front BL	To BL	Front STA	To STA	Front WL	To WL	Door	Door Part Number
ZFH06206	DPM0666162-501	312	Aft fuselage RHS	-52.0	52.0	621.0	718.0	92.0	93.5	311-BB	DPM2440100-501

Report Number: DPM065R001 Report Name: Ground test evaluation and substantiation Last rev: B Date: 27-Oct-98

MRD Ground test form

Print date: 03-Jul-99

PEng: 12 Position: Project ground test engineer PEng Name: Nixon Sam Dept: 2210 Phone: 6451
 GTEng: 65 Position: Ground test group leader GTEng Name: Harrison Carl Dept: 2392 Phone: 3317

MRD: HPBL0504

Type: TA

Drawing Number: DPM6172109 Drawing Name: Tube assy Rev: C Date: 19-Oct-97

Part Number: DPM6172109-501 Part Name: Tube assy

Width (in): 0 Length (in): 50 Height (in): 0 Diameter (in): 0.25 Thickness (in): 0

Weight (lb): 0.089 Material: Titanium

Part envelope and center of gravity in general aircraft coordinates in inches: BL CG: 25 STA CG: 260 Wt CG: 16

From BL: 25 To BL: 25 From STA: 237 To STA: 285 From WL: 16 To WL: 16

Inst Part Number: DPM6191600-501 Inst Part Name: Hydraulic sys - brake steering - Instl

System: Fluid Subsystem: Hydraulic Subsystems: Brakes

Map Drawing Number: DPM6100001 Map Drawing Name: Hydraulic system map Rev: A Date: 02-Oct-97

Map System Report: DPM610R001 Map Report Name: Hydraulic system operation substantiation Rev: C Date: 15-Jun-98

FAR regulations:

MRD	Part Number	FAR	FAR Description
HPBL0504	DPM6172109-501	25.1309	Equipment, systems, and installations
HPBL0504	DPM6172109-501	25.1435	Hydraulic systems

Ground Test Date: 19-Oct-98

Ground Test Description: Perform ground test of HPBL0504, DPM6172109-501 as requested by ground test report requirements

Assembly

PEng	SEng	Dwg Number	Part Number	MPQ	MRD	Qty	E From	E To	Inst Part Number
5	617	DPM6172109	DPM6172109-501	1	HPBL0504	1	1	999	DPM6191600-501

Bay and Door

MRD	Part Number	Bay	Bay Name	From BL	To BL	From STA	To STA	From WL	To WL	Door	Door Part Number
HPBL0504	DPM6172109-501	131	Under floor systems Instl LHS	0.0	52.0	280.0	409.0	0.0	12.0	131-AZ	DPM2621101-01
HPBL0504	DPM6172109-501	121	Under floor avionics &	0.0	52.0	235.0	280.0	0.0	25.0	121-BZ	DPM2612101-04

Maintenance Report Number: DPM062R001 Report Name: Maintenance substantiation

MRD part maintenance form Print date: 26-Feb-99

PEng: 51 Position: Project mechanical engineer PEng Name: Baker Jim Dept: 2210 Phone: 6456
 MEng: 62 Position: Maintenance group leader MEng Name: Rubin Robert Dept: 2384 Phone: 3014

MRD: C101 Type: LR

Drawing Number: DPM4210021 Drawing Name: Autopilot servoactuator Iss: B
 Part Number: DPM4210021-501 Part Name: Autopilot servoactuator

Width (in): 2.486 Length (in): 7.593 Height (in): 2.486 Diameter (in): 2.486 Thickness (in): 0
 Weight (lb): 5.72664 Material:

Part center of gravity and envelope in general aircraft coordinates in inches: Bt CG: 33.470 STA CG: 401.65 Wt CG: 7.5300
 From Bt: To Bt: From STA: To STA: From Wt: To Wt:

Inst Part Number: DPM4210002-501 Inst Part Name: Aileron Control system in fus., LH
 System: Mechanical Subsystem: Flight control Subsystems: Aileron

Map Drawing Number: DPM4210001 Map Drawing Name: Aileron control map Iss: A
 Map System Report: DPM411R001 Map Report Name: Aileron flight control system operation Iss: A

AP regulations:

MRD	CFAR	CFAR Description
C101	25.0671	General
C101	25.0685	Control system details

Assembly:

PEng	SEng	Dwg Number	Part Number	MPO	MRD	Qty	From	To	Inst Part Number
5	421	DPM4210020	DPM4210020-501	1	C101	1	1	999	DPM4210000-501
5	421	DPM4210021	DPM4210021-501	1	C101	1	0	0	DPM4210002-501

Technical data:

MRD	Part Number	Part Number	Capacitance	Power	Cooling type	Heat	Part Attachment	Technical Data
C101	DPM4210020-501						3/8" axle & 3/8" rod end	
C101	DPM4210021-501						3/8" axle & 3/8" rod end	

Failure parts:

MRD	Part Number	Place	Failure Description	Treatment Description	Failure Date	Treat Date	Report Number
C101	DPM4210020-501	Flight test maneuver	Impossible to actuate	Fixed as noted in process standard	05-May-98	15-May-98	DPM061R004

Maintenance service level: Weekly Mean time between failure (MTBF) in hours: 213675

Maintenance service:

MRD	Part Number	Num	Maintenance service description
C101	DPM4210020-501	1	Apply grease for actuator's bearing equally
C101	DPM4210020-501	2	Check it displacement distance as good as possible
C101	DPM4210020-501	3	Tighten an attachment bolts tightly
C101	DPM4210021-501	1	Apply grease for actuator's bearing
C101	DPM4210021-501	2	Check it displacement distance
C101	DPM4210021-501	3	Tighten an attachment bolts

Remarks:

MRD PART form

Print Date: 11-May-99

Eng: 4 Position: Project structure engineer Eng Name: Carter Colin Dept: 2210 Phone: 6437
Seng: 121 Position: Wing inb'd fuel tank str. engineer Seng Name: Dole Tony Dept: 2346 Phone: 5748

MRD: A120B02L Type: MP Part Number: DPM1200060-001 Part Name: Spar 2, LH

Dwg Number: DPM1200060 Dwg Name: Wing spar 2 Last rev: A Date: 29-Jan-98

Width (in): 3.25 Length (in): 77.1 Height (in): 14.2 Diameter (in): 0 Thickness (in): 3.25

Weight (lb): 18.973 Material: AL7075-T7351

Part envelope and center of gravity in general aircraft coordinates in inches: BLCG: 76.00 STAGG: 534.40 WLCG: 10.20

from BL: 76.00 to BL: 76.00 From STA: 423.00 To STA: 499.00 From WL: 1.70 To WL: 18.80

Inst Part Number: DPM1200010-501 Inst Part Name: Fwd spar assy, LH

System: Structure Subsystem: Wing Subsystems: Torsion box

Map Dwg Number: DPM1100001 Map Dwg Name: Wings structure layout Last rev: C Date: 07-Feb-98

Map System Report: DPM044R001 Map Report Name: Wing stress substantiation Last rev: A Date: 29-Jan-98

Assembly:

Eng	Seng	Dwg Number	Part Number	MPQ	MRD	Qty	EF	From	EF	To	Inst Part Number
4	121	DPM1200060	DPM1200060-001	1	A120B02	1	1	999	DPM1200010-501		

Weight subform:

Wing	MRD	Part Number	Target weight (lb)	Weight Report	Weight Engineer	Remarks
48	A120B02L	DPM1200060-001	18.971	DPM048R001		

Dynamics loads vibration subform:

Wing	MRD	Part Number	Freq	Freq	Amplit	Acceler	Report Number	Remarks
			Hz	in/cps	in/cps	in/cps		
47	A120B02L	DPM1200060-001	5	2000	0.024	3.1g	DPM047R001	

MRD critical parts:

Eng	MRD	Part Number	Report Number	Damage tolerance and fatigue Notes
46	A120B02L	DPM1200060-001	DPM046R001	

MRD part manufacturing technology:

MRD	Part Number	Technology	Chem. He. Sh. to	Pretreatment	Finish
			min. at 100 deg		
			ing. 1 hr. Relea		
			at end		
A120B02L	DPM1200060-001	5 axis	<input type="checkbox"/>	<input checked="" type="checkbox"/> Chromic acid anodize	<input checked="" type="checkbox"/> Integral fuel tank coating

FAR regulations:

MRD	Part Number	FAR	FAR Description
A120B02L	DPM1200060-001	25.0305	Strength and deformation
A120B02L	DPM1200060-001	25.0607	Fasteners

Design consideration:

MRD	Part Number	Item	Design Criteria	Inst Report Number
A120B02L	DPM1200060-001	1	Spar 2, LH to be jig located	DPM121R001
A120B02L	DPM1200060-001	2	Spar 2, LH holes to be drilled by proper equipment	DPM121R001
A120B02L	DPM1200060-001	3	Longitudinal Grain Direction	DPM121R001

MRD PART form

Print date: 11-May-99

Action Items

Item	Part Number	Part Name	MRD Effect	Question	Answer
2	DPM1200060-001	Spar 2, LH	A120B02L	1: Requested a note to break sharp edges of P/N DPM1200060-001, A120B02L	These remarks will be included in the next issue A of the dwg DPM1200060

Technical data

Bay and Door

MRD structure part grounding

Str	MRD	Gr	MRD	Sys	MRD	BLGG	STAGG	WLOG	Dwg Number	Part Number	Part Name	Gr type	Rep Number
A120B02L	GR0110	FJ001-12	59.5	487	9	DPM6241101	DPM6241101-501	Tube assy	Jumper	DPM765R001			

MRD system part grounding

Ground test subform

MRD	Part Number	Ground Test Description	GT Date	Report Number
A120B02L	DPM1200060-001	Perform ground test of A120B02L, DPM1200060-001 as requested by ground test report requirements	29-Jan-98	DPM065R001

Flight test subform

Production and procurement

Production rout card subform

MRD	Part Number	N	Operation	Time in hrs	Cost in \$
A120B02L	DPM1200060-001	1	Trim and adjust P/N DPM1200060-001	1.703	\$162.94
A120B02L	DPM1200060-001	2	Drill P/N DPM1200060-001	2.042	\$195.38

Production rout card tools subform

Tool Part Number	Dwg Number	Part Number	Part Name	Width	Length	Height	MRD	BLGG	STAGG	WLOG
DPM0741160-501	DPM1200060	DPM1200060-001	Dlg, Spar 2, LH	3.41	81	15	A120B02L	76.0	534.4	102

Production rout card accessory tools subform

MRD	Part Number	Inst Part Number	Tool Number	Tool Function	Tool Name
A120B02L	DPM1200060-001	DPM1200010-501	CS964	Cutting Tool	Countersink
A120B02L	DPM1200060-001	DPM1200010-501	DR285	Cutting Tool	Drill Rod
A120B02L	DPM1200060-001	DPM1200010-501	PG327	Inspection Tool	Pressure Gauge

Production rout card Process Standards subform

MRD	Part Number	Inst Part Number	PS Number	Subject	Title
A120B02L	DPM1200060-001	DPM1200010-501	PS3114	Protective Finish	Integral Fuel Tank Coating
A120B02L	DPM1200060-001	DPM1200010-501	PS3661	Chemical Treatment	Chromic Acid Anodizing

Orders subform

MEng	MRD	Part Number	Manufacturer	Vendor Number	Qty	Tool at	Inst Part Number	Fr	Fr	Order Date
81	A120B02L	DPM1200060-001	Mill Computer		1	4	DPM1200010-501	1	4	10-Jan-97

MRD PART form

Print date: 11-May-99

Procurement summary

Invoice Item	MRD	Part Number	Manufacturer	Supplier	Qty	Unit price	Total price	Supply Date
41907	1	A120B02L	DPM1200060-001	Mill Computer	4	\$3,598.61	\$14,394.44	24-Nov-97

Advanced Material Order (AMO) data

Eng AMO	MRD	Part Number	Description	Weight	Date	Req Number
76	AMPA9522	A120B02L	DPM1200060-001: Plate AL7075-T7351, t= 3.25 Inch, 24 x 72 Inch	562.9	01-Apr-97	DPM080R00

Integrated Engineering Methodologies and Analysis

MRD Design To Cost data

MRD	A120B02L	Part Number	DPM1200060-001	Part Name	Spar 2, LH	Type	MP			
Length, inch	77.1	Area, Sq.in	250.6	Volume, V(cu.in)	3508.0	Group	Machining part	Group code		
Material	Aluminum	Material form	A=aluminum plate, B=aluminum extrusion, C=steel plate, D=steel extrusion, E=titanium plate, F=titanium extrusion				Material form code	A		
Process symbol	Comb	Process	A=mill, B=turn, C=drill, D=combined				Process code	D		
Sizing	A at 0<V<5, B at 5<V<50, C at 50<V<250, D at 250<V<1500, E at V>1500 cu.in						Size	E	Size/complexity	K
Complexity	3<=Operations<=6		Operations	5	Complexity	B				
Size/complexity	Size=A-F, Size=B-G, Size=C-H, Size=D-J, Size=E-K						WTCC	BADK		

MRD Part Production Cost Estimation by Design to Cost Method

MRD	Part Number	Qty	Type	Group Code	Work time in hrs	Setup time in hrs	Run time in hrs	Manufacturer	Hour rate in \$	Cost in \$	Remarks
A120B02L	DPM1200060-001	MP	1	BADK	1.39	0.93	Mill Vision	\$60.14	\$139.52		
A120B02L	DPM1200060-001	MP	1	BADK	1.39	0.93	Mill Computer	\$95.68	\$221.98		

MRD Design To Cost tool data

MRD:	A120B02L	Part Number:	DPM1200060-001	Part Name:	Spar 2, LH	Type:	M
Jig Part Number:	DPM0741160-501	Jig Part Name:	Jig, Spar 2, LH	Jig type:	JA		
Length, inch:	81.0	Area, Sq.in:	276.0	Volume, V(cu.in):	4140.6	Group:	Jig assy
						Group code:	E
Material:		Material form:				Material form code:	A
Process symbol:	BoReam	Process:	A=bore/ream, B=bore/ream/mill, C=mill assy			Proc code:	A
Sizing:	A at 0<L<24, B at 24<L<48, C at 48<L<96, D at 96<L<120, E at L>120 in					Size:	C
						Size/complexity:	H
Complexity:	3<=Operations<=6		Operations:	6	Complexity:	B	
Size/complexity:	Size=A-F, Size=B-G, Size=C-H, Size=D-J, Size=E-K					WTCC:	EAAH

MRD Tool Production Cost Estimation by Design to Cost Method

MRD	Part Number	Tool Part Number	Tool Type	Group Code	Work time in hrs	Setup time in hrs	Run time in hrs	Manufacturer	Hour rate in \$	Cost in \$	Remarks
A120B02L	DPM1200060-001	DPM0741160-501	JA	1	EAAH	1.11	0.65	Mill Computer	\$95.68	\$168.40	

MRD DFMA Criteria Summary

MRD	A120B02L	Part Number	DPM1200060-001	Part Name	Spar 2 , LH
MRDA	A120BFAL	InstPartNumber	DPM1200010-501		
Function	Minimum Part Criteria		Assembly of necessary items	Envelope	Flat

MRD PART form

Print date: 11-May-99

Min dimension, inch	>=3.0, <3.0 & >=0.35, <0.35	Insertion alpha symmetry	360°	Orientation beta symmetry	180°
Item characteristics causing difficulties	Nest or tangle	Yes	Nest or tangle severity	Yes	Flexible
Stick together	Sticky	Fragile	Not fragile	Slippery	Not slippery
Grasping and manipulating tools	tweezers	Not needed	Other grasping tools	Not needed	Optical magnifiers
Handling assistance	Two hands	Needed	Two people	Needed	Mechanical handling
Insertion difficulties	View of mating location	Clear view	Access	Easy access	Align or position
Resistance to insertion	Not significant	Severe insertion difficulties	Not severe	Holding down required	Not required
For large parts	Regrasping prior to insertion	Not required	Supporting of weight during insertion	Not required	
	Large depth of insertion	Not required			
Part fetching distance	Within easy reach	Tool fetching distance	7 to 10 feet away		

DFMA operations

DFMA analysis

Components selection status subform: 1 - Approved for Production and Procurement, 2 - for Review only, 3 - Forbidden											
MRD	Part Number	Manufacturer	Vendor Part Number	Supplier	Lead time, in days	Price	Des	Pr	Man	Pr	Sta
											Date
A120B02L	DPM1200060-001	Mill Vision		Mill Vision	50	4,066.43	121	1	81	2	9
A120B02L	DPM1200060-001	Mill Computer		Mill Computer	40	3,598.61	121	1	81	1	9

Report Number: DPM061R001 Report Name: Reliability substantiation Last revision: D Date: 23-Apr-98

MRD part reliability form Part Number: 03-Jul-99

Perf: 5 Position: Project mechanical engineer Perf Name: Baker Jim Des: 2210 Phone: 6456

Perf: 61 Position: Reliability group leader Perf Name: Ford Betty Des: 2383 Phone: 3025

MRD: C101 Part Number: DPM4210020-501 Part Name: Autopilot servoactuator Type: LR

Dwg Number: DPM4210020 Dwg Name: Autopilot servoactuator Last rev: B Date: 23-Jun-98

Width (in): 2.486 Length (in): 7.593 Height (in): 2.486 Diameter (in): 2.486 Thickness (in):

Weight (lb): 5.352 Material:

Part envelope and center of gravity in general aircraft coordinates in inches: R: CG: 33.47 STA: CG: 401.65 W: CG: 7.53

From BL: From BR: From SL: From SR: From ML: From MR: From WL: From WR:

Inst Part Number: DPM4210000-501 Inst Part Name: Aileron Control system in fus., LH

System: Mechanical Subsystem: Flight control Subsystem: Aileron

Map Drawing Number: DPM4210001 Dwg Name: Aileron control map Last rev: A Date: 21-Jul-98

Map System Report: DPM411R001 Report Name: Aileron flight control system operation Last rev: A Date: 15-Apr-98

FAR regulations:

MRD	Part Number	FAR	FAR Description
C101	DPM4210020-501	25.0671	General
C101	DPM4210020-501	25.0685	Control system details
C101	DPM4210021-501	25.0671	General
C101	DPM4210021-501	25.0685	Control system details

Assembly:

PEng	SEng	Dwg Number	Part Number	MPG	MRD	Qty	EFrom	ETo	Inst Part Number
5	421	DPM4210020	DPM4210020-501	1	C101	1	1	999	DPM4210000-501
5	421	DPM4210021	DPM4210021-501	1	C101	1	0	0	DPM4210002-501

Technical Data:

MRD	Part Number	Tray Part Number	Capacitance	Power	Cooling Type	Heat	Part Attachment	Technical Data
C101	DPM4210021-501						3/8" axle & 3/8" rod end	
C101	DPM4210020-501						3/8" axle & 3/8" rod end	

Failure parts:

MRD	Part Number	Place	Failure Description	Treatment Description	Failure Date	Treat Date	Report Number
C101	DPM4210020-501	Flight test maneuver	Impossible to actuate	Fixed as noted in process standard	05-May-98	15-May-98	DPM061R004

Reliability failure rate/hours: 2.68E-07

Reliability substantiation:

MRD part Responsibility form

Print date: 03-Jul-99

PEng: 4, Position: Project structure engineer, PEng Name: Carter Colin, Dept: 2210, Phone: 6437
 SEng: 121, Position: Wing inb'd fuel tank str. engineer, SEng Name: Dole Tony, Dept: 2346, Phone: 5748

MRD: A120B02L, Part Number: DPM1200060-001, Part Name: Spar 2, LH, Type: MP

Dwg Number: DPM1200060, Dwg Name: Wing spar 2, Last revision: A, Date: 29-Jan-98

Width (in): 3.25, Length (in): 77.1, Height (in): 14, Diameter (in): 0, Thickness (in): 3.25

Weight (lb): 18.973, Material: AL7075-T7351

Part center of gravity and envelope in general aircraft coordinates in inches: BL CG: 76, STA CG: 534.4, Wt CG: 10.2

From BL: 76, To BL: 76, From STA: 423, To STA: 499, From Wt: 1.7, To Wt: 18.8

Inst Part Number: DPM1200010-501, Inst Part Name: Fwd spar assy, LH

System: Structure, Subsystem: Wing, Subsystems: Torsion box

Map System Report: DPM044R001, Report Name: Wing stress substantiation, Last rev: A, Date: 29-Jan-98

Map Dwg Number: DPM1100001, Map Dwg Name: Wings structure layout, Last rev: C, Date: 07-Feb-98

Designer Name: Davies Michael, Position: Structure design engineer, Dept: 2346, Phone: 3363

Assembly:

PEng	SEng	Dwg Number	Part Number	MRD	MRD	Qty	E From	E To	Inst Part Number
4	121	DPM1200060	DPM1200060-001	1	A120B02	1	1	999	DPM1200010-501

Design Engineering Order Responsibility

Dwg Number	Revision	Discipline	Name	Position	Dept	Phone	Date
DPM1200060	A	Approved	Dole Tony	Structure group leader	2346	5748	29-Jan-98
DPM1200060	A	Designer	Davies Michael	Structure design engineer	2346	3363	25-Jan-98
DPM1200060	A	Fatigue	Fortune Dave	Fatigue engineer	2366	8943	26-Jan-98
DPM1200060	A	Maintenance	Bairdow James	Maintenance engineer	2384	3218	27-Jan-98
DPM1200060	A	Material	Anthony Mark	Materials engineer	2331	3047	28-Jan-98
DPM1200060	A	Production	Makdment Paul	Production wing str. engineer	3461	3349	27-Jan-98
DPM1200060	A	Project	Carter Colin	Project structure engineer	2210	6437	29-Jan-98
DPM1200060	A	Stress	Yard Peter	Stress engineer	2364	5776	25-Jan-98
DPM1200060	A	Weight	Norton George	Weight engineer	2368	6722	28-Jan-98

Critical parts responsible

MRD: A120B02L, Part Number: DPM1200060-001, Report Number: DPM046R001, Revision: C, Date: 25-Apr-98
 (1) 46, Name: Barnet Mark, Position: Fatigue & damage tolerance group leader, Dept: 2366, Phone: 6215

Weight and balance responsible

MRD: A120B02L, Part Number: DPM1200060-001, Rep Number: DPM048R001, Last revision: 98, Date: 14-Mar-98
 Name: Cleveland Ed, Position: Weight engineer, Dept: 2368, Phone: 2359
 WEng: 48, WEng Name: Sponder Barry, Position: Weight and balance group leader, Dept: 2368, Phone: 6225
 P.Eng: 2, P.Eng Name: Ford John, Position: Project design assist. manager, Dept: 2210, Phone: 6452

Dynamics Responsible

MRD: A120B02L, Part Number: DPM1200060-001, Report Number: DPM047R001, Last revision: A, Date: 23-Jul-98
 Eng Name: Keeble John, Position: Loads engineer, Dept: 2367, Phone: 3361
 VEng: 47, V Eng Name: Turner Tim, Position: Loads group leader, Dept: 2367, Phone: 6219
 P.Eng: 4, P Eng Name: Carter Colin, Position: Project structure engineer, Dept: 2210, Phone: 6437

MRD part Responsibility form

Print date: 03-Jul-99

Structure Grounding Responsible

MRD	GR0110	Report Number	DPM765R001	Last revision	B	Date	27-Feb-98
SubMRD	FJ001-12	Part Number	DPM6241101-501	SubMRD	A120802L	Part Number	DPM1200060-001
Eng	765	Eng Name	Allard Chris	Position	EMC & lightning engineer	Dept	2373 Phone 3185
Eng	765	Eng Name	Hill Elisabeth	Position	EMC & lightning group leader	Dept	2373 Phone 9205
Eng	6	Eng Name	Bush Gary	Position	Project electrical engineer	Dept	2210 Phone 6448

Systems Grounding Responsible

Maintenance responsible

Reliability Responsible

Failure Parts Analysis Responsible

Ground test responsible

Part Number	DPM1200060-001	Rep Number	DPM065R001	Last rev	B	Date	27-Oct-98	Ground Test Date	29-Jan-98
MRD	A120802L	Eng Name	Boulding Jane	Position	Ground test engineer	Dept	2392	Phone	3317
Eng	65	Eng Name	Harrison Carl	Position	Ground test group leader	Dept	2392	Phone	3317
Eng	12	Eng Name	Nixon Sam	Position	Project ground test engineer	Dept	2210	Phone	6457

Flight test responsible

Production and Procurement Team list

Production/Procurement Responsible

MRD	A120802L	Part Number	DPM1200060-001	Start Date	05-Feb-98	Finish Date	19-Feb-98
Eng	81	Eng Name	Maldment Paul	Position	Production wing str.engineer	Dept	3461 Phone 3349
Eng	9	Eng Name	Truman Larry	Position	Project manufacturing engineer	Dept	2210 Phone 6442

Tooling Responsible

Part Number	DPM1200060-001	Tool Part N	DPM0741160-501	Draw Number	DPM0741160	Last revision	D	Date	13-Jul-97
MRD	A120802L	Name	Burnett Alan	Position	Tooling designer	Dept	3454	Phone	3224
Eng	74	Eng Name	Tennant Bert	Position	Tooling manager	Dept	3454	Phone	3368
Eng	9	Eng Name	Truman Larry	Position	Project manufacturing engineer	Dept	2210	Phone	6442

Order Responsible

MRD	81	Position	Production wing str.engineer	Manuf Eng Name	Maldment Paul	Dept	3461	Phone	3349	Part Number	DPM1200060-001	MRD	A120802L	Order Date	10-Jan-97
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MRD part Responsibility form

Print date: 03-Jul-99

Procurement Responsibility

Invoice: 41907	Part Number: DPM1200060-001	MRD: A120B02L	Print Date: 24-Nov-97
CName: Dovedale Mary	Position: Procurement clerk	Dept: 3456	Phone: 9092
Proj No: 75	Name: Peterson Dick	Position: Procurement manager	Dept: 3456 Phone: 3369

Advanced Material Order (AMO) Responsibility

MRD: A120B02L	Part Number: DPM1200060-001	Rep Number: DPM080R001	Last revision: B	Date: 25-Oct-97
AMO: AMPA9522	Name: Swayze Patrick	Position: Production engineer	Dept: 3461	Phone: 4856
MEng: 76	MEng Name: Merchant Stuart	Position: Machining parts production engineer	Dept: 3463	Phone: 8457
P.Eng: 9	P.Eng Name: Truman Larry	Position: Project manufacturing engineer	Dept: 2210	Phone: 6442

MRD Production route card form

Print date: 03-Jul-99

Proj: 4 Position: Project structure engineer Eng Name: Carter Colin Dept: 2210 Phone: 6437
 Seng: 121 Position: Wing inb'd fuel tank str. engineer Seng Name: Dole Tony Dept: 2346 Phone: 5748

MRD: A120B01L

Type: MP

Drawing Number: DPM1200050 Drawing Name: Wing spar 1 Rev: C Date: 11-Mar-98

Part Number: DPM1200050-001 Part Name: Spar 1, LH

Width (in): 3.25 Length (in): 81.5 Height (in): 14.5 Diameter (in): 0 Thickness (in): 3.25

Weight (lb): 20.548 Material: AL7075-T7351

Part envelope and center of gravity in general aircraft coordinates in inches: BL Co: 58 STA Co: 531.5 WL Co: 9.8

From BL: 58 To BL: 58 From STA: 415 To STA: 497 From WL: -0.3 To WL: 19.5

First Part Number: DPM1200010-501 First Part Name: Fwd spar assy, LH

System: Structure Subsystem: Wing Subsystems: Torsion box

Map Dwg Number: DPM1100001 Map Dwg Name: Wings structure layout Rev: C Date: 07-Feb-98

Map System Report: DPM044R001 Map Report Name: Wing stress substantiation Rev: A Date: 29-Jan-98

Assembly:

PEng	SEng	Dwg Number	Part Number	MPQ	MRD	Qty	EFrom	ETo	First Part Number
4	121	DPM1200050	DPM1200050-001	1	A120B01	1	1	999	DPM1200010-501

MRD critical parts

MRD part manufacturing technology

MRD	Part Number	Technology	Ch	HE	SH	Bo	Pr	St	Fin
A120B01L	DPM1200050-001	5 axis							

Design consideration

MRD	Part Number	Item	Design Criteria	First Report Number
A120B01L	DPM1200050-001	1	Spar 1, LH to be jig located	DPM121R001
A120B01L	DPM1200050-001	2	Spar 1, LH holes to be drilled by proper equipment	DPM121R001
A120B01L	DPM1200050-001	3	Longitudinal Grain Direction	DPM121R001

Action items

Item	Part Number	Part Name	MRD	Effect	Question	Answer
1	DPM1200050-001	Spar 1, LH	A120B01	L	1: Requested a note for dimension "A" of P/N DPM1200050-001, A120B01L	A change require redesign and will be introduced in the next issue C of the dwg DPM1200050
3	DPM1200050-001	Spar 1, LH	A120B01	L	1: Requested a note for dimension "B" of P/N DPM1200050-001, A120B01L	Accepted. Will be updated in the next issue C of the dwg DPM1200050

Distribution and environment

MRD Production route card form

Print date: 03-Jul-99

Production route card subform

MRD	Part Number	N	Operation	Time mins	Cost in \$
A120B01L	DPM1200050-001	1	Trim and adjust P/N DPM1200050-001	3.091	\$295.75
A120B01L	DPM1200050-001	2	Drill P/N DPM1200050-001	0.554	\$53.01

MRD Part Production Cost Estimation by Design to Cost Method

MRD	Part Number	Qty	Work Group	Setup Time in hrs	Run Time in hrs	Manufacturer	Hour rate in \$	Cost in \$	Remarks
A120B01L	DPM1200050-001	MP	1	BADK	1.39	0.93	Mill Vision	\$60.14	\$139.52
A120B01L	DPM1200050-001	MP	1	BADK	1.39	0.93	Mill Computer	\$95.68	\$221.98

Production route card tool subform

MRD	Part Number	Tool Part Number	Tool Part Name	Width	Length	Height	Tool Type	Notes
A120B01L	DPM1200050-001	DPM0741150-501	Dig. Spar 1, LH	3.41	85.57	15	Female tool	

Tool Production cost Estimation by Design to Cost Method

MRD	Part Number	Tool Part Number	Tool Work Group	Setup Time in hrs	Run Time in hrs	Manufacturer	Hour rate in \$	Cost in \$	Remarks
A120B01L	DPM1200050-001	DPM0741150-501	JA	1	EAAN	1.46	0.98	Mill Computer	\$95.68 \$233.46

MRD tools and jigs shop subform

MRD	Part Number	Tool Part Number	Tool Number	Tool Function	Tool Name
A120B01L	DPM1200050-001	DPM1200010-501	CC305	Cutting Tool	Cable Cutter
A120B01L	DPM1200050-001	DPM1200010-501	HH721	Cutting Tool	Hand Hone
A120B01L	DPM1200050-001	DPM1200010-501	SP457	Inspection Tool	Sine Plate

MRD part Process Standard subform

MRD	Part Number	Inst Part Number	PS Number	Subject	Title
A120B01L	DPM1200050-001	DPM1200010-501	PS3114	Protective Finish	Integral Fuel Tank Coating
A120B01L	DPM1200050-001	DPM1200010-501	PS3661	Chemical Treatment	Chromic Acid Anodizing

Orders subform

MRD	Part Number	Manufacturer	Vendor Number	Qty	Total Inst Part Number	ET from	ET to	Order Date	
81	DPM1200050-001	Mill Computer		1	4	DPM1200010-501	1	4	09-Jan-97

Requirement subform

Invoice	Item	Part Number	Part Name	Manufacturer	Qty	Price	Total
41067	1	DPM1200050-001	Spar 1, LH	Mill Computer	4	7.33	\$9.32

50172718-123000

MRD structure penetration by systems form

Date: 03-Jul-99

Proj: 4 Position: Project structure engineer Name: Carter Colin Dept: 2210 Phone: 6437
 Sng: 121 Position: Wing inb'd fuel tank str. engineer Name: Dole Tony Dept: 2346 Phone: 5748

MRD: A120B02L

Type: MP

Drawing Number: DPM1200060 Drawing Name: Wing spar 2 Rev: A Date: 29-Jan-98

Part Number: DPM1200060-001 Part Name: Spar 2, LH

Width (in): 3.25 Length (in): 77.1 Height (in): 14 Diameter (in): 0 Thickness (in): 3.25

Weight (lb): 18.973 Material: AL7075-T7351

Structure part center of gravity in aircraft coordinates: BU OS (in): 76 STA OS (in): 534.4 WL OS (in): 10.2

Structure part envelope in inches to aircraft general coordinates: System

From BU: 76 To BU: 76 From STA: 423 To STA: 499 From WL: 1.7 To WL: 18.8

Use Part Number: DPM1200010-501 Inst Part Name: Fwd spar assy, LH

System: Structure Subsystem: Wing Subsystems: Torsion box

Map Dwg Number: DPM1100001 Map Dwg Name: Wings structure layout Rev: C Date: 07-Feb-98

Map System Report: DPM044R001 Map Report Name: Wing stress substantiation Rev: A Date: 29-Jan-98

AP: Penetration

MRD	Part Number	FAR	FAR Description
A120B02L	DPM1200060-001	25.0305	Strength and deformation
A120B02L	DPM1200060-001	25.0607	Fasteners

Outline critical path

Form: MRD	Report Number	Damage tolerance and Fatigue Notes
46: A120B02L	DPM1200060-001	DPM046R001

MRD systems penetration

System	MRD	System	Subsystem	Subsystems	Struct	MRD	Num	BU	STA	WL	Dist	Notes
FV013-32	Fluid	Fuel	Vent		A120B02L	1	76	456	10	2.5		
FR001-32	Fluid	Fuel	Refueling		A120B02L	2	76	475	11.5	2.5		
FJ001-12	Fluid	Fuel	Jettison		A120B02L	3	76	487.5	9	1.3		
WC1723	Electrical	Fuel	Vent		A120B02L	4	76	433	10	2.3		
A120B02L	Structure	Wing	Torsion box		A120B02L	91	76	433	4.3	0.3	Spar 2, LH, tooling hole	
A120B02L	Structure	Wing	Torsion box		A120B02L	92	76	450.5	9.6	0.3	Spar 2, LH, tooling hole	
A120B02L	Structure	Wing	Torsion box		A120B02L	93	76	488	14.7	0.3	Spar 2, LH, tooling hole	

MRD grounding system

GMRD	System	MRD	Gr type	Length (in)	Grounding design consideration	Res in Ohm	Gr Req Number
GR0110	FJ001-12	A120B02L	Jumper	4.25	Jumper from pipe FJ001-12 attach to main frame	0.021	DPM765R001
		A120B02L					

MRD structure penetration by systems form

Print date: 07-Nov-98

Proj: 4 Position: Project structure engineer Name: Carter Colin Dept: 2210 Phone: 6437
 SProj: 121 Position: Wing inb'd fuel tank str. engineer Name: Dole Tony Dept: 2346 Phone: 5748

MRD: A120B02L Type: MP

Drawing Number: DPM1200060 Drawing Name: Wing spar 2

Part Number: DPM1200060-001 Part Name: Spar 2, LH

Width (in): 3.25 Length (in): 77.1 Height (in): 14 Diameter (in): 0 Thickness (in): 3.25

Weight (lb): 18.973 Starter Weight (lb): 18.971 Material: AL7075-T7351

Structure part center of gravity in aircraft coordinates: BL CG (in): 76 STA CG (in): 534.4 WL CG (in): 10.2

Structure part envelope in inches in aircraft general coordinates system:

From BL: 76 To BL: 76 From STA: 423 To STA: 499 From WL: 1.7 To WL: 18.8

Inst Part Number: DPM1200010-501 Inst Part Name: Fwd spar assy, LH

System: Structure Subsystem: Wing Subsystem: Torsion box

Map Drawing Number: DPM1100001 Map Drawing Name: Wings structure layout

Map System Report: DPM044R001 Map Report Name: Wing stress substantiation

PAR: 25.0305 PAR Description: Strength and deformation

Structure critical part:

Proj	MRD	GR Report Number	Par Note
46	A120B02L	DPM046R001	

MRD systems penetration:

System	MRD	System	Subsystem	Struct	MRD	Num	BL	STA	WL	Dist	Notes
FV013-32	Fluid	Fuel	Vent	A120B02L	1	76	456	10	2.5		
FR001-32	Fluid	Fuel	Refueling	A120B02L	2	76	475	11.5	2.5		
FJ001-12	Fluid	Fuel	Jettison	A120B02L	3	76	487.5	9	1.3		
WC1723	Electrical	Fuel	Vent	A120B02L	4	76	433	10	2.3		
A120B02L	Structure	Wing	Torsion box	A120B02L	91	76	433	4.3	0.3	Spar 2, LH, tooling hole	
A120B02L	Structure	Wing	Torsion box	A120B02L	92	76	450.5	9.6	0.3	Spar 2, LH, tooling hole	
A120B02L	Structure	Wing	Torsion box	A120B02L	93	76	488	14.7	0.3	Spar 2, LH, tooling hole	

MRD grounding subform:

GR	MRD	Sys	MRD	Gr Type	Length	Grounding design consideration	Res	GR	GR	Rep	Num
GR0110	FJ001-12	A120B02L	Jumper	4.25	Jumper from pipe FJ001-12 attach to main frame	0.021	DPM765R001				
					A120B02L						

Page: 1 of 1

MRD system parts penetrating main structure Print date: 03-Jul-99

Eng: 5 Position: Project mechanical engineer Name: Baker Jim Dept: 2210 Phone: 6456
 Eng: 611 Position: Hydraulic system leader Name: Edmonton Ron Dept: 2353 Phone: 3093

MRD: HP2P0408 Type: TA

Drawing Number: DPM6112107 Drawing Name: Tube assy Rev: C Date: 22-Feb-98

Part Number: DPM6112107-501 Part Name: Tube assy

Width (in): 0 Length (in): 35 Height (in): 0 Diameter (in): 0.5 Thickness (in): 0

Weight (lb): 0.128 Material: Titanium

System part center of gravity in aircraft coordinate system: BL CG (in): -37.20 STA CG (in): 571.5 WL CG (in): 16

System part envelope in inches in general aircraft coordinate system:

From BL: -37.2 To BL: -37.2 From STA: 555 To STA: 588 From WL: 17 To WL: 15

Inst Part Number: DPM6192200-502 Inst Part Name: Hydraulic system instl in cental cabin, RH

System: Fluid Subsystem: Hydraulic Subsystems: Power 2

Map Dwg Number: DPM6100001 Map Dwg Name: Hydraulic system map Rev: A Date: 02-Oct-97

Map System Report: DPM610R001 Map Report Name: Hydraulic system operation substantiation Rev: C Date: 15-Jun-98

FAR regulations:

MRD	Part Number	FAR	FAR Description
HP2P0408	DPM6112107-501	25.1309	Equipment, systems, and installations
HP2P0408	DPM6112107-501	25.1435	Hydraulic systems

MRD data hole diameters and coordinates of structure parts penetrated by the system part:

Struct MRD	System	Subsystem	Subsystems	Num	BL	STA	WL	DL	Systems MRD	Notes
AFR31R	Structure	Fuselage	Aft cabin	2	-18	559	15	2.25	HP2P0408	
AFR32R	Structure	Fuselage	Aft cabin	5	-28	571.5	23	2.25	HP2P0408	
AFR33R	Structure	Fuselage	Aft cabin	6	-29	584	23	2.25	HP2P0408	

Grounding:

Gr MRD	System MRD	Sub MRD	Gr type	Length, inch	Grounding design consideration	Resistance	Rep Number
GR0513	HP2P0408	AFR32R	Jumper	4.86	Jumper from pipe HP2P0408 attach to main frame	0.035	DPM765R001
					AFR32R		

MRD system parts penetrating main structure

Print date: 07-Nov-98

PEng 5 Position: Project mechanical engineer Name: Baker Jim Dept: 2210 Phone: 6456
SEng 617 Position: Hydraulic system leader Name: Stevenson Nancy Dept: 2353 Phone: 2065

MRD: HPBL0504

Type: TA

Drawing Number: DPM6172109 Drawing Name: Tube assy Iss: C

Part Number: DPM6172109-501 Part Name: Tube assy

Width (in): 0 Length (in): 50 Height (in): 0 Diameter (in): 0.25 Thickness (in): 0

Weight (lb): 0.052 Target Weight (lb): 0.053 Material: Titanium

Systems part center of gravity in aircraft coordinate system: BL CG (in): 25 STA CG (in): 260 WL CG (in): 16

system part envelope in inches in general aircraft coordinates system:

From BL: 25 To BL: 25 From STA: 237 To STA: 285 From WL: 16 To WL: 16

Inst Part Number: DPM6191600-501 Inst Part Name: Hydraulic sys - brake steering - Inst

System: Fluid Subsystem: Hydraulic Subsystems: Brakes

Map Drawing Number: DPM6100001 Map Drawing Name: Hydraulic system map Iss: A

Map System Report: DPM610R001 Map Report Name: Hydraulic system operation substantiation Iss: C

FAR: 25.1435 FAR Description: Hydraulic systems

MRD data: hole diameter and coordinates of structure parts penetrated by the system part:

Structure	MRD	System	Subsystem	Subsystems	Num	BL	STA	WL	Dia	Systems MRD	Notes
AFR06L	Structure	Fuselage	Nose		9	25	246	22.5	1.675	HPBL0504	
AFR07L	Structure	Fuselage	Nose		7	24	257	22.5	2.25	HPBL0504	
AFR08L	Structure	Fuselage	Nose		7	24	268.5	22.5	2.25	HPBL0504	
AFR09L	Structure	Fuselage	Fwd cabin		4	19	280	22.5	1.75	HPBL0504	

MRD systems part technical data main form Print date: 03-Jul-99

Proj: 5 Position: Project mechanical engineer Proj Name: Baker Jim Desk: 2210 Phone: 6456
 Ser: 421 Position: Fus. primary controls engineer Ser Name: Dogbert Charles Desk: 2351 Phone: 5781

MRD: C101 Type: LR

Drawing Number: DPM4210021 Drawing Name: Autopilot servoactuator Rev: B Date: 23-Jun-98

Part Number: DPM4210021-501 Part Name: Autopilot servoactuator

Width (in): 2.486 Length (in): 7.593 Height (in): 2.486 Diameter (in): 2.486 Thickness (in): 0
 Weight (lb): 5.72664 Material:

Part envelope and center of gravity in general aircraft coordinates in inches: BL CG: 33.5 STA CG: 401.6 WL CG: 7.5
 From BL: To BL: From STA: To STA: From WL: To WL:

Inst Part Number: DPM4210002-501 Inst Part Name: Aileron Control system in fus., LH

System: Mechanical Subsystem: Flight control Systems: Aileron

Map Dwg Number: DPM4210001 Map Dwg Name: Aileron control map Rev: A Date: 21-Jul-98

Map System Report: DPM411R001 Map Report Name: Aileron flight control system operation Rev: A Date: 15-Apr-98

Assembly:

Perq	SEq	Dwg Number	Part Number	MPC	MRD	Qty	Efrom	ETto	Inst Part Number
5	421	DPM4210020	DPM4210020-501	1	C101	1	1	999	DPM4210000-501
5	421	DPM4210021	DPM4210021-501	1	C101	1	0	0	DPM4210002-501

MRD explanation:

MRD	Part Number	FAR	FAR Description
C101	DPM4210020-501	25.0671	General
C101	DPM4210020-501	25.0685	Control system details
C101	DPM4210021-501	25.0671	General
C101	DPM4210021-501	25.0685	Control system details

System Part technical data:

MRD	Part Number	Qty	Part Number	Capacity	Power	Cooling type	Heat	Part Attachment	Technical Data
C101	DPM4210021-501							3/8" axle & 3/8" rod end	
C101	DPM4210020-501							3/8" axle & 3/8" rod end	

System Part interface summary:

MRDA	Inst Part Number	MRD	Part Number	Part Name	System	Subsystem	Subsystems
C101	DPM4210020-501	C101A	DPM7430051-501	Primary servo	Avionics	Flight control	Aileron
C101	DPM4210021-501	C101A	DPM7430057-501	Primary servo	Avionics	Flight control	Aileron
C101	DPM4210020-501	C101B	DPM7430052-501	Mount servo	Electrical	Flight control	Aileron

MRD structure part technology form

Printed date: 03-Jul-99

Proj: 2 Position: Project design asst. manager PRD Name: Ford John Dept: 2210 Phone: 6452
 SProj: 100 Position: Structure department manager SProj Name: Dart Derick Dept: 2340 Phone: 5732

MRD: A102A Type: AS

Drawing Number: DPM1020000 Drawing Name: Aircraft structure instl Rev: C Date: 01-Jul-98

Part Number: DPM1020000-501 Part Name: Aircraft structure assy

Width (in): 792 Length (in): 821 Height (in): 220 Diameter (in): 0 Thickness (in):

Weight (lb): 8958.244 Material:

Part Envelope and Center of Gravity in general aircraft coordinates in inches: BL CG: 0 STA CG: 545.7 WL CG: 39.8
 from BL: -386 to BL: 386 from STA: 144 to STA: 965 from WL: -10 to WL: 210

Inst Part Number: DPM1000000-501 Inst Part Name: Aircraft assy

System: Aircraft Subsystem: Systems Subsystems:

Map Dwg Number: DPM1020001 Map Dwg Name: Aircraft structure layout Rev: B Date: 07-Oct-97

Map System Report: DPM040R001 Map Report Name: Stress evaluation & substantiation Rev: B Date: 23-Jun-98

FAR regulations:

MRD	Part Number	FAR	FAR Description
A102A	DPM1020000-501	25.0305	Strength and deformation
A102A	DPM1020000-501	25.0307	Proof of structure

Structure part manufacture technology

MRD part subassembly definition

MRDA	Dwg Number	MRD	Part Number	Part Name	System	Subsystem	Subsystems
A102A	DPM1100000	A110AL	DPM1100000-501	Wing assy, LH	Structure	Wing	
A102A	DPM1100000	A110AR	DPM1100000-502	Wing assy, RH	Structure	Wing	
A102A	DPM2000000	A200A	DPM2000000-501	Fuselage assy	Structure	Fuselage	
A102A	DPM3000000	A300EA	DPM3000000-501	Empennage assy	Structure	Empennage	

MRD structure part technology form

Form date: 03-Jul-99

Perf: 4 Position: Project structure engineer Perf Name: Carter Colin Des: 2210 Phone: 6437
 Eng: 121 Position: Wing inb'd fuel tank str. engineer Eng Name: Dole Tony Des: 2346 Phone: 5748

MRD: A120B05L Type: MP

Drawing Number: DPM1200090 Drawing Name: Wing spar 5 Rev: B Date: 03-Mar-98

Part Number: DPM1200090-001 Part Name: Spar 5, LH

Width (in): 3.25 Length (in): 63.2 Height (in): 12.5 Diameter (in): 0 Thickness (in): 3.25

Weight (lb): 14.413 Material: AL7075-T7351

Part envelope and center of gravity in general aircraft coordinates in inches: 21.03 130 STA 03 543.1 W C 12.2

From BL: 130 To BL: 130 From STA: 442 To STA: 507 From WL: 7.7 To WL: 16.7

Inst Part Number: DPM1200010-501 Inst Part Name: Fwd spar assy, LH

System: Structure Subsystem: Wing Subsystem: Torsion box

Map Dwg Number: DPM1100001 Map Dwg Name: Wings structure layout Rev: C Date: 07-Feb-98

Map System Report: DPM044R001 Map Report Name: Wing stress substantiation Rev: A Date: 29-Jan-98

FAI regulation:

MRD	Part Number	FAI	FAI Description
A120B05L	DPM1200090-001	25.0305	Strength and deformation
A120B05L	DPM1200090-001	25.0625	Fitting factors

Structure part manufacture technology:

MRD	Part Number	Technology	Check Finish to normal or end ing the holes to the end	Pre-treatment	Finish
A120B05L	DPM1200090-001	5 axis	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/>	Chromic acid anodize	Integral fuel tank coating

MRD part subassembly definitions:

ORDERS form

Print Date: 03-Jul-99

Order Date: 05-Jan-97

MEing: 9 Position: Project manufacturing engineer Name: Truman Larry
 Dept: 2210 Phone: 6442 Fax: 7672
 MEing: 89 Position: Production aft fus.sys.engineer Name: Murfitt Tony
 Dept: 3462 Phone: 3343 Fax: 7037

Orders Summary:

MEing	Part Number	Manufacturer	Vendor Number	Qty	Total	Inst	Part Number	El from	El to	Order Date
89	AEI6170E04	FittingLand	AEI6170E04	1	4		DPM6111136-501	1	4	05-Jan-97
89	AEI6170E04	FittingLand	AEI6170E04	1	4		DPM6111137-501	1	4	05-Jan-97
86	AEI6170E04	FittingLand	AEI6170E04	1	4		DPM6141191-501	1	4	05-Jan-97
86	AEI6170E04	FittingLand	AEI6170E04	1	4		DPM6141191-502	1	4	05-Jan-97
86	AEI6170E04	FittingLand	AEI6170E04	1	4		DPM6141191-503	1	4	05-Jan-97
86	AEI6170E04	FittingLand	AEI6170E04	1	4		DPM6141191-504	1	4	05-Jan-97
86	AEI6170E04	FittingLand	AEI6170E04	1	4		DPM6141191-505	1	4	05-Jan-97
86	AEI6170E04	FittingLand	AEI6170E04	1	4		DPM6141191-506	1	4	05-Jan-97
86	AEI6170E04	FittingLand	AEI6170E04	1	4		DPM6141191-507	1	4	05-Jan-97
86	AEI6170E04	FittingLand	AEI6170E04	1	4		DPM6141191-508	1	4	05-Jan-97
91	AEI6170E04	FittingLand	AEI6170E04	1	4		DPM6142191-501	1	4	05-Jan-97
91	AEI6170E04	FittingLand	AEI6170E04	1	4		DPM6142191-502	1	4	05-Jan-97
91	AEI6170E04	FittingLand	AEI6170E04	1	4		DPM6142191-503	1	4	05-Jan-97
91	AEI6170E04	FittingLand	AEI6170E04	1	4		DPM6142191-504	1	4	05-Jan-97
91	AEI6170E04	FittingLand	AEI6170E04	1	4		DPM6142191-505	1	4	05-Jan-97
91	AEI6170E04	FittingLand	AEI6170E04	1	4		DPM6142191-506	1	4	05-Jan-97
91	AEI6170E04	FittingLand	AEI6170E04	1	4		DPM6142191-507	1	4	05-Jan-97
91	AEI6170E04	FittingLand	AEI6170E04	1	4		DPM6142191-509	1	4	05-Jan-97
89	AEI6170E04	FittingLand	AEI6170E04	1	4		DPM6143191-501	1	4	05-Jan-97
89	AEI6170E04	FittingLand	AEI6170E04	1	4		DPM6143191-502	1	4	05-Jan-97
89	AEI6170E04	FittingLand	AEI6170E04	1	4		DPM6143191-503	1	4	05-Jan-97
89	AEI6170E04	FittingLand	AEI6170E04	1	4		DPM6143191-504	1	4	05-Jan-97
86	AEI6170E04	FittingLand	AEI6170E04	1	4		DPM6151191-501	1	4	05-Jan-97
86	AEI6170E04	FittingLand	AEI6170E04	1	4		DPM6151191-502	1	4	05-Jan-97
86	AEI6170E04	FittingLand	AEI6170E04	1	4		DPM6151191-503	1	4	05-Jan-97
86	AEI6170E04	FittingLand	AEI6170E04	1	4		DPM6151191-504	1	4	05-Jan-97
86	AEI6170E04	FittingLand	AEI6170E04	1	4		DPM6151191-505	1	4	05-Jan-97
86	AEI6170E04	FittingLand	AEI6170E04	1	4		DPM6151191-506	1	4	05-Jan-97
86	AEI6170E04	FittingLand	AEI6170E04	1	4		DPM6151191-507	1	4	05-Jan-97
86	AEI6170E04	FittingLand	AEI6170E04	1	4		DPM6151191-508	1	4	05-Jan-97
86	AEI6170E04	FittingLand	AEI6170E04	1	4		DPM6151191-509	1	4	05-Jan-97
86	AEI6170E04	FittingLand	AEI6170E04	1	4		DPM6151191-510	1	4	05-Jan-97
86	AEI6170E04	FittingLand	AEI6170E04	1	4		DPM6151191-511	1	4	05-Jan-97
86	AEI6170E04	FittingLand	AEI6170E04	1	4		DPM6151191-512	1	4	05-Jan-97
88	AEI6170E04	FittingLand	AEI6170E04	1	4		DPM6152101-501	1	4	05-Jan-97
88	AEI6170E04	FittingLand	AEI6170E04	1	4		DPM6152102-501	1	4	05-Jan-97
86	AEI6170E04	FittingLand	AEI6170E04	1	4		DPM6152191-501	1	4	05-Jan-97
86	AEI6170E04	FittingLand	AEI6170E04	1	4		DPM6152191-502	1	4	05-Jan-97

Page 1 of 5701

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ORDERS form

Print date: 04-Dec-98

Print date: 24-Jan-97

Org:	9: position	Project manufacturing engineer	Name:	Truman Larry
	Dept:	2210	Phone:	6442
			Fax:	7672
Meng:	87: position	Production fwd fus.sys.engineer	Name:	McLean Tony
	Dept:	3452	Phone:	3345
			Fax:	7039

Item	Part Number	Manufacturer	Vendor Number	Qty	Order Date	Inst Part Number
87	AE16170D06	FittingLand	AE16170D06	2	24-Jan-97	DPM6111128-501
89	AE16170D06	FittingLand	AE16170D06	1	24-Jan-97	DPM61111351-501

50172718-123088

Part form

Printed date: 04-Dec-98

Part management

PEng:	4	PEngName:	Carter Colin	Position:	Project structure engineer	Dept:	2210	Phone:	6437
SEng:	221	SEngName:	Fineman Howard	Position:	Fwd pass. cabin struct. engineer	Dept:	2344	Phone:	5709
Dwg Number:	DPM2212111	Part Name:	Side skin, LH	Part Number:	DPM2212111-001	Rev:	A221S2L		

Part Number:	DPM2212111-001	Part Name:	Side skin, LH	Time:	SP
Width in inches:	127.45	Height in inches:	30	Thickness in inches:	0.125
Thickness in inches:	0.125	Material:	AL2024-T3	Weight in lb:	45.882

Critical part remarks

Assembly

PEng	SEng	Dwg Number	Part Number	MFG	MRD	Qty	From	Eff To	Inst	Part Number
4	221	DPM2212111	DPM2212111-001	1	A221S2L	1	1	999	DPM2212110-501	

Part assembly design criteria

Part Number	MRD	Item	Design Criteria	Report Number
DPM2212111-001	A221S2L	1	Side skin, LH to be jig located	DPM221R001
DPM2212111-001	A221S2L	2	Side skin, LH holes to be drilled by proper equipment	DPM221R001

Part assembly action item

Action Item	Part Number	MRD	Question	Answer	
3065	1	DPM2212111-001	A221S2L	Requested a note for dimension "B" of P/N DPM2212111-001, A221S2L	Accepted. Will be updated in the next issue B of the dwg DPM2212111
3065	2	DPM2212111-001	A221S2L	Requested a note for tolerance "B" of P/N DPM2212111-001, A221S2L	These remarks will be included in the next issue B of the dwg DPM2212111

Technology submittal

Part Number	Technology	Chem Heat Treat	Shot	Pretreatment	Finish	
DPM2212111-001	Sheet rolling	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Chromate conversion coating	Epoxy primer

Technical data

Part form

Printed date: 04-Dec-98

Production record

Part Number	Operation	Time
DPM2212111-001	1 Trim and adjust P/N DPM2212111-001	0.25
DPM2212111-001	2 Drill P/N DPM2212111-001	1.84

Tools of fits

Part Number	Tool Part Number	Tool Part Name	Width	Length	Height	Tool Type	Tool Notes
DPM2212111-001	DPM0745151-501	Jig, Side skin, LH	133.82	31.5	3	Male tool	

Orders subform

MEHQ	Part Number	Manufacturer	Vendor Number	Qty	Order Date	Inst Part Number
83	DPM2212111-001	Press Vision		1	13-Feb-97	DPM2212110-501

Procurement subform

Invoice Item	Part Number	Part Name	Manufacturer	Qty	Price	Total
41139	1 DPM2212111-001	Side skin, LH	Press Vision	1	8700	8702

50172719-123000

Personnel Staff form

01/10/99

Name: Sherman Betty
 Personnel Position: Project Interiors engineer
 ID: 38476298
 Personnel Dept: 2210
 Phone: 6458
 Fax: 7688
 Supervisor Name: Berton Marvin
 Supervisor Position: Project manager
 Supervisor Dept: 2210

Name: Folding Ernst
 Personnel Position: Project landing gears engineer
 ID: 53262829
 Personnel Dept: 2210
 Phone: 6450
 Fax: 7680
 Supervisor Name: Berton Marvin
 Supervisor Position: Project manager
 Supervisor Dept: 2210

Name: Sommers Tony
 Personnel Position: Project engine engineer
 ID: 39457589
 Personnel Dept: 2210
 Phone: 6455
 Fax: 7685
 Supervisor Name: Berton Marvin
 Supervisor Position: Project manager
 Supervisor Dept: 2210

Name: Fell Dan
 Personnel Position: Project engineer
 ID: 38465628
 Personnel Dept: 2210
 Phone: 6497
 Fax: 7123
 Supervisor Name: Berton Marvin
 Supervisor Position: Project manager
 Supervisor Dept: 2210

Name: Hart Ann
 Personnel Position: Project certification engineer
 ID: 36748329
 Personnel Dept: 2210
 Phone: 6446
 Fax: 7676
 Supervisor Name: Berton Marvin

Process Standards

03-10-20

P.S. Number	PS3010	Subject	Non-Destructive Test
Title	Radiographic Inspection		
P.S. Number	PS3013	Subject	Bonding
Title	Adhesive bonding to Graphite-Epoxy Components		
P.S. Number	PS3014	Subject	Protective Finish
Title	Epoxy Primer Application for Structure		
P.S. Number	PS3018	Subject	Machining
Title	Machining of Titanium Alloys		
P.S. Number	PS3027	Subject	Composite Materials
Title	Glass Epoxy Laminates in Sandwich Structure		
P.S. Number	PS3029	Subject	Electrical Connectors
Title	Electrical Connectors Attachment		
P.S. Number	PS3040	Subject	Electrical Connectors
Title	Electrical Connectors Fabrication		
P.S. Number	PS3042	Subject	Fasteners
Title	Lock-Bolt Installation		
P.S. Number	PS3046	Subject	Fluids
Title	Pneumatic System Installation		
P.S. Number	PS3050	Subject	Fluids
Title	Flare Fittings Installation		
P.S. Number	PS3056	Subject	Non-Destructive Test
Title	Tubing Inspection		
P.S. Number	PS3068	Subject	Wiring
Title	Identification and Marking of Wire Bundles		
P.S. Number	PS3098	Subject	Heat Treatment
Title	Heat Treatment Process		
P.S. Number	PS3109	Subject	Non-Destructive Test
Title	Magnetic Particle Inspection		
P.S. Number	PS3112	Subject	Non-Destructive Test
Title	Adhesive Bonded Structure Inspection		
P.S. Number	PS3114	Subject	Protective Finish
Title	Integral Fuel Tank Coating		
P.S. Number	PS3116	Subject	Metal Forming
Title	Metal Forming and Fabrication		
P.S. Number	PS3126	Subject	Composite Materials
Title	Wet Layup Piles		
P.S. Number	PS3128	Subject	Metal Forming
Title	Cold Working in Titanium Alloys		
P.S. Number	PS3131	Subject	Lubrication
Title	Lubricants Application Process		
P.S. Number	PS3135	Subject	Sealing
Title	Fairing Sealing		
P.S. Number	PS3141	Subject	Fasteners
Title	Blind Fasteners Installation		
P.S. Number	PS3144	Subject	Fasteners
Title	Composite Structure by Fasteners		
P.S. Number	PS3147	Subject	Fluids
Title	Hydraulic System Installation		
P.S. Number	PS3153	Subject	Shims

PROCUREMENT FORM

Print date: 03-Jul-99

Invoice: 40810

Supply Date: 13-Aug-97

75 Position: Procurement manager Name: Peterson Dick Dept: 3456

Phone: 3369 Fax: 7069

Supplier: Servocomputer Country: Australia Address: Syney

Phone: 30292053 Fax: 39205333

Position: Procurement clerk Name: Clemente Monica Clerk: 53728190 Dept: 3456 Phone: 9091

Procurement system

Invoice Item	Part Number	Part Name	Manufacturer	Qty	Price	Total
40810	1 DPM6140070-501	Flutter damper	Servocomputer	8	5.18	41.44
40810	2 DPM6140200-502	Servoactuator	Servocomputer	4	2.79	11.16
40810	3 DPM6140100-501	Servoactuator	Servocomputer	4	9.88	39.52

50172718-123000

Page 166 of 180

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PROCUREMENT FORM

Print date: 04-Dec-98

Invoice: 40775

Supply date: 11-Aug-97

Prod: 75 Position: Procurement manager

Name: Peterson Dick

Dept: 3456

3369

7060

Supplier: Gordon mechanism

Country: USA

Address: Mansfield

Phone: 34511528

Fax: 43424808

Position: Procurement clerk

Name: Doverdale Mary

Card: 22478392

Dept: 3456 Phone: 9092

Procurement subform

Invoice	Item	Part number	Part name	Manufacturer	Qty	Price	Unit
40775	1	DPM6312103-502	Upper cardan, NLG mechanism, F	Gordon mecha	1	26	25.98
40775	2	DPM6312101-501	Jaw, NLG mechanism, LH	Gordon mecha	1	57.8	57.84
40775	3	DPM6311210-502	NLG wheel, 18 x 4.4	Gordon mecha	1	3140	3144

60173718-123009

Production routcard form

Print date: 03-Jul-99

Eng: 9 Position: Project manufacturing engineer Eng Name: Truman Larry Dept: 2210 Phone: 6442
 Mfg: 81 Position: Production wing str.engineer Eng Name: Maldment Paul Dept: 3461 Phone: 3349

Part Number: DPM1200160-002 Part Name: Spar 12, RH Start Date: 05-Apr-98 Finish Date: 10-Apr-98
 MRD: A120B12R WBS: 36112 Work Order: 8136112 Last revision: A Date: 6-Mar-98

Dwg Number: DPM1200160 Dwg Name: Wing spar 12 Width (in): 3.25 Length (in): 54 Height (in): 9 Diameter (in): 0 Thickness (in): 3.25
 Weight (lb): 10.042 Material: AL7075-T7351 AL CG: -265 STA EC: 536.5 Wt CG: 19.8

Part center of gravity and envelope in general aircraft coordinates in inches: From BL: -272 To BL: -258 From STA: 513 To STA: 560 From WL: 17.5 To WL: 22.5

First Part Number: DPM1200010-502 First Part Name: Fwd spar assy, RH Subsystem: Torsion box
 System: Structure Subsystem: Wing C Date: 07-Feb-98
 Map Dwg Number: DPM1100001 Dwg Name: Wings structure layout A Date: 29-Jan-98
 Map System Report: DPM044R001 Report Name: Wing stress substantiation

Assembly	PEng	SEng	Dwg Number	Part Number	MRQ	MRD	Qty	EF from	EF to	Inst Part Number
4	122	DPM1200160	DPM1200160-002	1	A120B12	1	1	999	DPM1200010-502	

MRD	Part Number	Tool Part Number	Tool Part Name	Width	Length	Height	Tool Type	Notes
A120B12R	DPM1200160-002	DPM0741260-502	Jlg Spar 12, RH	3.41	56.17	9	Inspection tool	

MRD	Part Number	Operation	Time	Cost
A120B12R	DPM1200160-002	1 Trim and adjust P/N DPM1200160-002	1.132	\$108.31
A120B12R	DPM1200160-002	2 Drill P/N DPM1200160-002	0.797	\$76.26

MRD	Part Number	Tool Part Number	Tool Function	Tool Name
A120B12R	DPM1200160-002	DPM1200010-502	Cutting Tool	Diamond-point Chisel
A120B12R	DPM1200160-002	DPM1200010-502	Cutting Tool	Permaswage Tool
A120B12R	DPM1200160-002	DPM1200010-502	Inspection Tool	Vibration Indicator

MRD	Part Number	First Part Number	PS Number	Subject	Title
A120B12R	DPM1200160-002	DPM1200010-502	PS3114	Protective Finish	Integral Fuel Tank Coating
A120B12R	DPM1200160-002	DPM1200010-502	PS3661	Chemical Treatment	Chromic Acid Anodizing

MRD	Part Number	Manufacturer	Vendor Number	Qty	Total Inst	Part Number	EF from	EF to	Order Date
81	DPM1200160-002	Mil Computer		1	4	DPM1200010-502	1	4	22-Feb-97

Production routecard form

Print date: 04-Dec-98

PEng 9 Position Project manufacturing engineer PEng Name Truman Larry Dep 2210 Phone 6442
 RE A120AL Position Production wing str.engineer RE Name Maidmont Paul Dep 3461 Phone 3349
 Part Number DPM1200000-501 Part Name Wing torsion box assy, LH ITV MA
 MRD A120AL WBS 36110 NonOrder 8136110
 Drawing Number DPM1200000 Drawing Name Wing torsion box inst C
 Width (in) 203 Height (in) 313 Thickness (in) 15 Diameter (in) 0
 Weight (lb) 1261.515 Target Weight (lb) 1251.51 Material
 Part center of gravity in general aircraft coordinates: X CG (in) 162.8 Y CG (in) 501.2 Z CG (in) 16.6
 Part envelope in inches in general aircraft coordinates in inches:
 From BL 40 To BL 386 From STA 409 To STA 606 From WL -2.3 To WL 20.5
 Inst Part Number DPM1100000-501 Inst Part Name Wing assy, LH
 System Structure Subsystem Wing Subsystem Torsion box
 Map Drawing Number DPM1100001 Map Drawing Name Wings structure layout
 Map System Report DPM044R001 Map Report Name Wing stress substantiation
 FAR 25.0305 FAR Description Strength and deformation

PEng	SEng	Dwg Number	Part Number	MRQ	MRD	Qty	E From	E To	Inst Part Number
4	120	DPM1200000	DPM1200000-501	1	A120AL	1	1	999	DPM1100000-501

Part Number	Tool Part Number	Tool Part Name	Width (in)	Length (in)	Tool Type	Tool Qty
DPM1200000-501	DPM0741100-501	Jig, Wing torsion box assy, LH	213.15	328.65	16	Assy jig

Part Number	N	Operation	Time
DPM1200000-501	1	Install part DPM1200010-501 Fwd spar assy, LH A120BFAL In jig	2.04
DPM1200000-501	2	Install part DPM1200020-501 Rear spar assy, LH A120BRAL In jig	1.83
DPM1200000-501	3	Install part DPM1200030-501 Rear auxiliary spar assy, LH A120B30L In jig	0.61
DPM1200000-501	4	Install part DPM1200040-502 MLG aft spar assy, RH A120B40R In jig	0.71
DPM1200000-501	5	Install part DPM1202100-501 Lower skin assy, LH A120S1AL In jig	0.72
DPM1200000-501	6	Install part DPM1202110-501 Lower skin assy, LH A120S2AL In jig	0.72
DPM1200000-501	7	Install part DPM1202200-501 Upper skin assy, LH A120S3AL In jig	0.64
DPM1200000-501	8	Install part DPM1202210-501 Upper skin assy, LH A120S4AL In jig	0.75

Project management form

Print date: 03-Jul-99

Engineer Number: 2

Discipline: Project general

Position: Project design assist. manager

Surname: Ford

Name: John

Dept: 2210

Phone: 6452

Fax: 7682

650621-87424709

Print date: 03-Jul-99!

Eng	1	Position	Project manager	Eng Name	Berton Marvin	Dept	2210	Phone	6453
Eng	2	Position	Project design assist. manager	Eng Name	Ford John	Dept	2210	Phone	6452
Report Number DPM001R001 Report Name A/c general definition Type RD Sheets 89 Format A4 IS C Dept 2210 Date 09-Apr-97 Update 04-Jun-98 Designer ID 38465628 Designer Name Fell Dan Dept 2210 Phone 6497 WBS 10000 Worktime in hours 506.2									

Supplier form

08-10-99

Supplier	Aerodata				
Country	USA	Address	New York		
	Phone	26351723	Facsimile	25119402	Hour rate in \$ \$85.66
Supplier	Aerofridge				
Country	USA	Address	Minneapolis		
	Phone	56478592	Facsimile	55246271	Hour rate in \$ \$80.38
Supplier	Aerosewage				
Country	USA	Address	Pittsburg		
	Phone	86278941	Facsimile	85046620	Hour rate in \$ \$95.63
Supplier	Aerowater				
Country	USA	Address	Missoula		
	Phone	32947463	Facsimile	31715142	Hour rate in \$ \$94.28
Supplier	Air instrument				
Country	Israel	Address	Natania		
	Phone	87546567	Facsimile	86314246	Hour rate in \$ \$48.70
Supplier	Air Transport				
Country	England	Address	Dover		
	Phone	59876535	Facsimile	58644214	Hour rate in \$ \$48.24
Supplier	Aircondition				
Country	USA	Address	Houston		
	Phone	47868394	Facsimile	46636073	Hour rate in \$ \$78.63
Supplier	Assembly				
Country	Israel	Address	Ashdod		
	Phone	36475652	Facsimile	32523153	Hour rate in \$ \$62.45
Supplier	Avia Computer				
Country	France	Address	Rue Luis 235, Lion		
	Phone	48859603	Facsimile	47627282	Hour rate in \$ \$51.22
Supplier	Bearing Computer				
Country	Canada	Address	Vinnipeg		
	Phone	18748592	Facsimile	17516271	Hour rate in \$ \$56.37
Supplier	Bend Scope				
Country	Canada	Address	Toronto		
	Phone	64635271	Facsimile	26364645	Hour rate in \$ \$86.49

60473718-122009

Part Number: DPM101R007, Requirement: Aircraft Systems Survivability substantiation, Date: 30-Aug-98
 Name: Plaistowe Tom, Position: Integration engineer, Part: 2341, Page: 3051

Survivability and EMC minimum distance form

Bay number:	115	Bay Name:	Flight controls under flight comptr LHS
Second part MRB:	C129	First part MRB:	G129
Part Number:	DPM4210010-501	Part Number:	DPM6311210-501
Part Name:	Push - pull rod	Part Name:	NLG wheel, 18 x 4.4
System:	Mechanical	System:	Fluid
Subsystem:	Flight control	Subsystem:	Landing gear
Subsystems:	Aileron	Subsystems:	NLG
Survivability code of first part:	CP	Survivability code of second part:	LG
Description:	Primary Flight Control System	Description:	Landing Gear
System:	Critical	System:	
Remarks:	Separation - 0.25 inch, 1 inch from moving parts	Remarks:	Separation - 0.25 inch, 1 inch from moving parts
Minimum distance between two parts in inch:		0.27	

Bay number:	115	Bay Name:	Flight controls under flight comptr LHS
Second part MRB:	C129	First part MRB:	G130
Part Number:	DPM4210010-501	Part Number:	DPM6311210-502
Part Name:	Push - pull rod	Part Name:	NLG wheel, 18 x 4.4
System:	Mechanical	System:	Fluid
Subsystem:	Flight control	Subsystem:	Landing gear
Subsystems:	Aileron	Subsystems:	NLG
Survivability code of first part:	CP	Survivability code of second part:	LG
Description:	Primary Flight Control System	Description:	Landing Gear
System:	Critical	System:	
Remarks:	Separation - 0.25 inch, 1 inch from moving parts	Remarks:	Separation - 0.25 inch, 1 inch from moving parts
Minimum distance between two parts in inch:		0.27	

Bay number:	115	Bay Name:	Flight controls under flight comptr LHS
Second part MRB:	C129	First part MRB:	G131
Part Number:	DPM4210010-501	Part Number:	DPM6311220-001
Part Name:	Push - pull rod	Part Name:	Nose tire, 18 x 4.4
System:	Mechanical	System:	Fluid
Subsystem:	Flight control	Subsystem:	Landing gear
Subsystems:	Aileron	Subsystems:	NLG
Survivability code of first part:	CP	Survivability code of second part:	LG
Description:	Primary Flight Control System	Description:	Landing Gear
System:	Critical	System:	
Remarks:	Separation - 0.25 inch, 1 inch from moving parts	Remarks:	Separation - 0.25 inch, 1 inch from moving parts
Minimum distance between two parts in inch:		0.27	

Report Number: DPM101R007 Report Name: Aircraft Systems Survivability substantiation Date: 30-Aug-98
 Name: Plaistowe Tom Position: Integration engineer Dept: 2341 Phone: 3051

Survivability and EMC code form

Survivability code of first part	AD	System	Critical
Description	Air Data System		
Remarks	Separation - 0.25 inch, 1 inch from moving parts		
Survivability code of first part	AH	System	Critical
Description	Attitude Heading Reference System		
Remarks	Separation - 0.25 inch, 1 inch from moving parts		
Survivability code of first part	AP	System	Essential
Description	APU System		
Remarks	Separation - 0.25 inch, 1 inch from moving parts		
Survivability code of first part	AS	System	Essential
Description	Anti-Skid		
Remarks	Separation - 0.25 inch, 1 inch from moving parts		
Survivability code of first part	AT	System	Critical
Description	Attitude		
Remarks	Separation - 0.25 inch, 1 inch from moving parts		
Survivability code of first part	CP	System	Critical
Description	Primary Flight Control System		
Remarks	Separation - 0.25 inch, 1 inch from moving parts		
Survivability code of first part	CS	System	Essential
Description	Secondary Flight Control System		
Remarks	Separation - 0.25 inch, 1 inch from moving parts		
Survivability code of first part	EF	System	Critical
Description	Electrical Flight Instruments System		
Remarks	Separation - 0.25 inch, 1 inch from moving parts		
Survivability code of first part	EI	System	Critical
Description	EICAS		
Remarks	Separation - 0.25 inch, 1 inch from moving parts		
Survivability code of first part	FE	System	
Description	Fire Protection/Extinguishing		
Remarks			
Survivability code of first part	FF	System	Critical
Description	Fuel Feed		
Remarks	Separation - 0.25 inch, 1 inch from moving parts		
Survivability code of first part	FM	System	Critical
Description	Fuel Quantity Measurement System		
Remarks	Separation - 0.25 inch, 1 inch from moving parts		
Survivability code of first part	FS	System	
Description	Fuel System		
Remarks			

60173718-123099

C-65

Tools and jigs form

Printed date: 02-Jul-99

Part management

Eng: 9	Eng Name: Truman Larry	Position: Project manufacturing engineer	Dept: 2210	Phone: 6442
SEng: 74	SEng Name: Tennant Bert	Position: Tooling manager	Dept: 3454	Phone: 3368
Dwg Number: DPM0741721	Dwg Name: Jig, Wing tip rear spar, LH & RH	Part Number: DPM0741721-501	MRD:	

Part Number: DPM0741721-501	Part Name: Jig, Wing tip rear spar, LH	Type: JA
Width in inches: 31.29	Length in inches: 43.68	Height in inches: 2
Thickness in inches: 0	Material:	Weight in lb: 6.4
Tool or jig type: Inspection tool		

Tool Notes:

PEng	SEng	Dwg Number	Part Number	MRD	MRD	Qty	EFrom	ETo	Inst	Part Number
9	74	DPM0741721	DPM0741721-501	1		1	1	999		DPM0741720-501

Parts made by the tool

Tool Part Number	Dwg Number	Part Number	Part Name	Width	Length	Height	MRD	BLOC	STAGE	WTE
DPM0741721-501	DPM1210021	DPM1210021-001	Wing tip rear spar, LH	29.8	41.6	2.5	A121BRL	369.5	611	39.5

Part/assembly design criteria

Part/assembly action items

Report Number: DPM001R003
Position: Project engineer
Revision Name: Work breakdown structure (WBS) report
Rev: 8 Date: 29-Mar-98
Eng Name: Orange Sara
Dept: 2210 Phone: 6488

Work Building Structure WBS form

Eng: 16 Engineer Name: Orange Sara
Position: Project configuration engineer
Dept: 2210 Phone: 6485
WBS: 1200

Work Description: Configuration Management

Eng: 14 Engineer Name: Porter Tom
Position: Project maintainability engineer
Dept: 2210 Phone: 6461
WBS: 2400

Work Description: Maintainability Program

Eng: 14 Engineer Name: Porter Tom
Position: Project maintainability engineer
Dept: 2210 Phone: 6461
WBS: 2400

Work Description: Maintainability Program

Eng: 14 Engineer Name: Porter Tom
Position: Project maintainability engineer
Dept: 2210 Phone: 6461
WBS: 2400

Work Description: Maintainability Program

Eng: 14 Engineer Name: Porter Tom
Position: Project maintainability engineer
Dept: 2210 Phone: 6461
WBS: 2400

Work Description: Maintainability Program

Eng: 14 Engineer Name: Porter Tom
Position: Project maintainability engineer
Dept: 2210 Phone: 6461
WBS: 2500

Work Description: Reliability Program

Eng: 14 Engineer Name: Porter Tom
Position: Project maintainability engineer
Dept: 2210 Phone: 6461
WBS: 2500

Work Description: Reliability Program

Eng: 14 Engineer Name: Porter Tom
Position: Project maintainability engineer
Dept: 2210 Phone: 6461
WBS: 2500

Work Description: Reliability Program

Eng: 2 Engineer Name: Ford John
Position: Project design assist. manager
Dept: 2210 Phone: 6452
WBS: 10000

Work Description: Air Vehicle

Eng: 2 Engineer Name: Ford John
Position: Project design assist. manager
Dept: 2210 Phone: 6452
WBS: 10000

Work Description: Air Vehicle

Eng: 100 Engineer Name: Dart Derick
Position: Structure department manager
Dept: 2340 Phone: 5732
WBS: 11000

Work Description: Airframe Structure

Eng: 100 Engineer Name: Dart Derick
Position: Structure department manager
Dept: 2340 Phone: 5732
WBS: 11000

Work Description: Airframe Structure

Eng: 100 Engineer Name: Dart Derick
Position: Structure department manager
Dept: 2340 Phone: 5732
WBS: 11000

Work Description: Airframe Structure

Report Number: DPM101R005 Report Name: Access doors provision & substantiation Last revision: B Date: 03-Mar-98 Name: Morrow Joshua Dept: 2341 Phone: 6039

Access Door

Door	Dwg Number	Part Number	Part Name	MFRD	BL CG	STA CG	WL CG	System	Subsystem	Subsystems	Door Attachment	Notes
111-AL	DPM2110100	DPM2110100-501	Radome assy	A211RA	0.0	160.0	33.0	Structure	Fuselage	Nose	2 axls & 4 latches	Nose radome
112-AR	DPM2122201	DPM2122201-011	Side skin panel, RH	A212SR1	-23.0	174.0	12.8	Structure	Fuselage	Nose	2 axls & 2 latches	Air-driven generator bay
112-BR	DPM2122201	DPM2122201-021	Side skin panel, RH	A212SR2	-18.0	190.0	9.0	Structure	Fuselage	Nose	2 axls & 2 latches	AC ground power receptacle
113-AL	DPM2122101	DPM2122101-011	Side skin panel, LH	A212SL1	25.0	181.0	21.0	Structure	Fuselage	Nose	28 csk 3/16" bolts	Equipment bay/brake steering hydraulics
114-AR	DPM2132201	DPM2132201-011	Side skin panel, RH	A213SR1	-27.0	219.0	11.0	Structure	Fuselage	Nose	14 csk 3/16" bolts	Flight controls under flight compartment floor
114-BZ	DPM2612101	DPM2612101-028	Cockpit floor RH, panel	A261F2R3	-21.0	228.0	25.0	Structure	Fuselage	Fwd section	20 pan head 3/16" bolts	Copilot's rudder pedals mechanism
114-CZ	DPM2612101	DPM2612101-012	Cockpit floor RH, panel	A261F2R1	-16.5	228.0	25.0	Structure	Fuselage	Fwd section	10 pan head 3/16" bolts	Copilot's left rudder pedal
114-DZ	DPM2612101	DPM2612101-022	Cockpit floor RH, panel	A261F2R2	-25.5	228.0	25.0	Structure	Fuselage	Fwd section	20 pan head 3/16" bolts	Copilot's right rudder pedal
115-AL	DPM2132101	DPM2132101-011	Side skin panel, LH	A213SL1	27.0	219.0	11.0	Structure	Fuselage	Nose	13 csk 3/16" bolts	Flight controls under flight compartment floor
115-BZ	DPM2612101	DPM2612101-027	Cockpit floor LH, panel	A261F2L3	21.0	228.0	25.0	Structure	Fuselage	Fwd section	20 pan head 3/16" bolts	Pilot's rudder pedals mechanism
115-CZ	DPM2612101	DPM2612101-011	Cockpit floor LH, panel	A261F2L1	16.5	228.0	25.0	Structure	Fuselage	Fwd section	10 pan head 3/16" bolts	Pilot's left rudder pedal
115-DZ	DPM2612101	DPM2612101-021	Cockpit floor LH, panel	A261F2L2	25.5	228.0	25.0	Structure	Fuselage	Fwd section	20 pan head 3/16" bolts	Pilot's right rudder pedal
116-AZ	DPM2121110	DPM2121110-012	Lower longeron, RH, panel	A212LBP	-13.0	181.0	10.2	Structure	Fuselage	Nose	22 pan head 3/16" bolts	Access to unlatch panel 112-AR

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Action Items

AI Item	Dwg Number	MRD	Part Number	Part Name	QEng	QDate	Question	Answer	AEng	ADate	Designer
1025	2	DPM7293500	WC1324	DPM7293500-502 Electrical harness	88	01-Jan-	Requested a note to clean before 97 inst of P/N DPM7293500-502, WC1324	These remarks will be included in the next issue C of the dwg DPM7293500	731	14-Jul-98	Tarr Nigel
1025	3	DPM7293500	WC1325	DPM7293500-503 Electrical harness	88	01-Jan-	Requested a note for insulation of 97 P/N DPM7293500-503, WC1325	The change will be included in the next issue C of the dwg DPM7293500	731	14-Jul-98	Tarr Nigel
1025	4	DPM7293500	WC1326	DPM7293500-504 Electrical harness	88	01-Jan-	Requested a note for testing 97 before inst of P/N DPM7293500-504, WC1326	Partially accepted and will be introduced in the next issue C of the dwg DPM7293500	731	14-Jul-98	Tarr Nigel
1025	5	DPM7293500	WC1327	DPM7293500-505 Electrical harness	88	01-Jan-	Requested a note for wire 97 preparation of P/N DPM7293500-505, WC1327	The change will be included for serial a/c in the next issue C of the dwg DPM7293500	731	14-Jul-98	Tarr Nigel
1025	6	DPM7293500	WC1328	DPM7293500-506 Electrical harness	88	01-Jan-	Requested a note for geometrical 97 definition of P/N DPM7293500-506, WC1328	A change require redesign and will be introduced in the next issue C of the dwg DPM7293500	731	14-Jul-98	Tarr Nigel
1025	1	DPM7293500	WC1323	DPM7293500-501 Electrical harness	88	01-Jan-	Requested a note for attachment 97 to plug of P/N DPM7293500-501, WC1323	Accepted. Will be updated in the next issue C of the dwg DPM7293500	731	14-Jul-98	Tarr Nigel
1026	1	DPM7470013	V007	DPM7470013-001 Cockpit auto/man switch	87	01-Jan-	Requested a note for jig located 97 of P/N DPM7470013-001, V007	The change will be included for prototype a/c in the next issue A of the dwg DPM7470013	781	31-Dec-97	Perry Kevin
1026	2	DPM7470013	V007	DPM7470013-001 Cockpit auto/man switch	87	01-Jan-	Requested a note inspection of 97 P/N DPM7470013-001, V007	Accepted. Will be updated in the next issue A of the dwg DPM7470013	791	31-Dec-97	Perry Kevin
1027	1	DPM6621211	VBL11-02	DPM6621211-501 Duct asy	89	01-Jan-	Requested transition of bending 97 point "g" of the pipe P/N DPM6621211-501, VBL11-02	These remarks will be included in the next issue B of the dwg DPM6621211	669	23-Jul-98	Lachlan Ian
1027	2	DPM6621211	VBL11-02	DPM6621211-501 Duct asy	89	01-Jan-	Requested an end fitting 135" of 97 the pipe P/N DPM6621211-501, VBL11-02	The change will be included in the next issue B of the dwg DPM6621211	669	23-Jul-98	Lachlan Ian
1028	5	DPM6150040	H452X1	MS25252-04 End male fitting 0.25"	86	01-Jan-	Requested a note for hole 97 preparation of P/N MS25252-04, H452X1	Accepted. Will be updated in the next issue C of the dwg DPM6150040	619	21-Jul-98	Menzies Andy
1028	6	DPM6150040	H452X2	MS25252-04 End male fitting 0.25"	86	01-Jan-	Requested a note for geometrical 97 definition of P/N MS25252-04, H452X2	These remarks will be included in the next issue C of this dwg DPM6150040	619	21-Jul-98	Menzies Andy
1028	4	DPM6150040	H452	DPM6150040-501 Krueger actuator	86	01-Jan-	Requested a note inspection of 97 P/N DPM6150040-501, H452	The change will be included for prototype a/c in the next issue C of the dwg DPM6150040	619	21-Jul-98	Menzies Andy

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AMO Rep Number DPM080R001 Report Name AMO (Advanced Material Order) Last rev B Date: 25-Oct-97

Eng Name: Swayze Patrick

Position: Production engineer

Dept: 3461 Phone: 4856

AMO report

AMO code	Description	Type	Material	Thick ness	Width	Len	Diam	We ght	Date	Remark
AMCA0001	Plate Acrylic, t= 0.375 inch, 24 x 48 inch	CP	Acrylic	0.375	24.0	48.0	0.000	13.0	01-Feb-97	
AMCC0001	Sheet Composite, t= 0.11 inch, 48 x 96 inch	CP	Composite	0.110	48.0	96.0	0.000	15.2	03-Apr-97	
AMCC0011	Plate Composite, t= 0.25 inch, 48 x 96 inch	CP	Composite	0.250	48.0	96.0	0.000	34.6	16-Feb-97	
AMCC0012	Plate Composite, t= 0.25 inch, 48 x 96 inch	CP	Composite	0.250	48.0	96.0	0.000	34.6	27-Mar-97	
AMCC0013	Plate Composite, t= 0.25 inch, 48 x 96 inch	CP	Composite	0.250	48.0	96.0	0.000	34.6	11-Feb-97	
AMCC0014	Plate Composite, t= 0.25 inch, 48 x 96 inch	CP	Composite	0.250	48.0	96.0	0.000	34.6	02-Jan-97	
AMCC0015	Plate Composite, t= 0.25 inch, 48 x 96 inch	CP	Composite	0.250	48.0	96.0	0.000	34.6	06-Mar-97	
AMCC0016	Plate Composite, t= 0.25 inch, 48 x 96 inch	CP	Composite	0.250	48.0	96.0	0.000	34.6	27-Mar-97	
AMCC0017	Plate Composite, t= 0.25 inch, 48 x 96 inch	CP	Composite	0.250	48.0	96.0	0.000	34.6	20-Jan-97	
AMCC0021	Plate Composite, t= 0.375 inch, 48 x 96 inch	CP	Composite	0.375	48.0	96.0	0.000	52.0	05-Mar-97	
AMCC0022	Plate Composite, t= 0.375 inch, 48 x 96 inch	CP	Composite	0.375	48.0	96.0	0.000	52.0	22-Jan-97	
AMCC0031	Plate Composite, t= 0.5 inch, 36 x 120 inch	CP	Composite	0.500	36.0	120.0	0.000	64.9	16-Feb-97	
AMCC0032	Plate Composite, t= 0.5 inch, 36 x 120 inch	CP	Composite	0.500	36.0	120.0	0.000	64.9	24-Mar-97	
AMCC0041	Plate Composite, t= 2 inch, 96 x 144 inch	CP	Composite	2.000	96.0	144.0	0.000	831.3	05-Apr-97	
AMCC0042	Plate Composite, t= 2 inch, 96 x 144 inch	CP	Composite	2.000	96.0	144.0	0.000	831.3	10-Feb-97	
AMCC0043	Plate Composite, t= 2 inch, 96 x 144 inch	CP	Composite	2.000	96.0	144.0	0.000	831.3	03-Feb-97	
AMCC0044	Plate Composite, t= 2 inch, 96 x 144 inch	CP	Composite	2.000	96.0	144.0	0.000	831.3	20-Jan-97	
AMCC0045	Plate Composite, t= 2 inch, 96 x 144 inch	CP	Composite	2.000	96.0	144.0	0.000	831.3	18-Mar-97	
AMCC0046	Plate Composite, t= 2 inch, 96 x 144 inch	CP	Composite	2.000	96.0	144.0	0.000	831.3	07-Apr-97	
AMCC0047	Plate Composite, t= 2 inch, 96 x 144 inch	CP	Composite	2.000	96.0	144.0	0.000	831.3	24-Mar-97	
AMCC0048	Plate Composite, t= 2 inch, 96 x 144 inch	CP	Composite	2.000	96.0	144.0	0.000	831.3	11-Feb-97	
AMCC0049	Plate Composite, t= 2 inch, 96 x 144 inch	CP	Composite	2.000	96.0	144.0	0.000	831.3	24-Mar-97	
AMCF0001	Sheet Fiberglass, t= 0.02 inch, 60 x 104 inch	CP	Fiberglass	0.020	36.0	48.0	0.000	1.0	10-Mar-97	
AMCF0002	Sheet Fiberglass, t= 0.02 inch, 60 x 104 inch	CP	Fiberglass	0.020	60.0	104.0	0.000	3.8	06-Jan-97	
AMCF0003	Sheet Fiberglass, t= 0.02 inch, 48 x 96 inch	CP	Fiberglass	0.020	48.0	96.0	0.000	2.8	09-Apr-97	
AMCG0001	Plate Glass, t= 0.375 inch, 36 x 48 inch	CP	Glass	0.375	36.0	48.0	0.000	19.5	02-Feb-97	
AMCG0002	Plate Glass, t= 0.375 inch, 36 x 48 inch	CP	Glass	0.375	36.0	48.0	0.000	19.5	27-Feb-97	
AMCH0001	Plate Honeycomb, t= 0.375 inch, 60 x 104 inch	CP	Honeycomb	0.375	60.0	104.0	0.000	70.4	11-Jan-97	
AMCH0002	Plate Honeycomb, t= 0.75 inch, 48 x 96 inch	CP	Honeycomb	0.750	48.0	96.0	0.000	103.9	07-Apr-97	
AMCK0001	Plate Kevlar, t= 0.25 inch, 48 x 60 inch	CP	Kevlar	0.250	48.0	60.0	0.000	21.6	19-Feb-97	
AMCK0002	Plate Kevlar, t= 0.25 inch, 48 x 60 inch	CP	Kevlar	0.250	48.0	60.0	0.000	21.6	31-Mar-97	
AMCK0003	Plate Kevlar, t= 0.375 inch, 120 x 144 inch	CP	Kevlar	0.375	120.0	144.0	0.000	194.8	26-Mar-97	
AMCK0004	Plate Kevlar, t= 0.5 inch, 36 x 48 inch	CP	Kevlar	0.500	36.0	48.0	0.000	26.0	12-Mar-97	
AMPA0001	Plate AL2024-T3, t= 0.875 inch, 24 x 72 inch	MP	AL2024-T3	0.875	24.0	72.0	0.000	151.5	29-Mar-97	
AMPA0002	Plate AL2024-T3, t= 0.875 inch, 24 x 72 inch	MP	AL2024-T3	0.875	24.0	72.0	0.000	151.5	02-Apr-97	
AMPA0003	Plate AL2024-T3, t= 1.75 inch, 24 x 72 inch	MP	AL2024-T3	1.750	24.0	72.0	0.000	303.1	09-Apr-97	
AMPA0011	Plate AL2024-T3, t= 2 inch, 24 x 72 inch	MP	AL2024-T3	2.000	24.0	72.0	0.000	346.4	09-Feb-97	
AMPA0021	Plate AL2024-T3, t= 2.25 inch, 24 x 72 inch	MP	AL2024-T3	2.250	24.0	72.0	0.000	389.7	05-Apr-97	
AMPA0031	Plate AL2024-T3, t= 2.5 inch, 24 x 72 inch	MP	AL2024-T3	2.500	24.0	72.0	0.000	433.0	20-Jan-97	
AMPA0041	Plate AL2024-T3, t= 2.75 inch, 24 x 72 inch	MP	AL2024-T3	2.750	24.0	72.0	0.000	476.3	09-Feb-97	
AMPA0042	Plate AL2024-T3, t= 3.25 inch, 24 x 72 inch	MP	AL2024-T3	3.250	24.0	72.0	0.000	562.9	28-Feb-97	
AMPA1001	Plate AL7050-T7352, t= 2.75 inch, 24 x 120 inch	MP	AL7050-T7352	2.750	24.0	120.0	0.000	793.8	11-Jan-97	
AMPA2001	Plate AL7050-T7351, t= 2.25 inch, 24 x 72 inch	MP	AL7050-T7351	2.250	24.0	72.0	0.000	389.7	30-Jan-97	
AMPA2002	Plate AL7050-T7351, t= 2.25 inch, 24 x 72 inch	MP	AL7050-T7351	2.250	24.0	72.0	0.000	389.7	03-Apr-97	
AMPA2011	Plate AL7050-T7351, t= 2.5 inch, 24 x 72 inch	MP	AL7050-T7351	2.500	24.0	72.0	0.000	433.0	03-Jan-97	
AMPA2021	Plate AL7050-T7351, t= 2.75 inch, 96 x 120 inch	MP	AL7050-T7351	2.750	96.0	120.0	0.000	3175.1	18-Mar-97	
AMPA2031	Plate AL7050-T7351, t= 3 inch, 24 x 72 inch	MP	AL7050-T7351	3.000	24.0	72.0	0.000	519.6	20-Mar-97	
AMPA2041	Plate AL7050-T7351, t= 3.25 inch, 24 x 72 inch	MP	AL7050-T7351	3.250	24.0	72.0	0.000	562.9	02-Feb-97	
AMPA2042	Plate AL7050-T7351, t= 3.25 inch, 48 x 144 inch	MP	AL7050-T7351	3.250	48.0	144.0	0.000	2351.4	06-Jan-97	
AMPA2043	Plate AL7050-T7351, t= 3.5 inch, 60 x 180 inch	MP	AL7050-T7351	3.500	60.0	180.0	0.000	3788.4	08-Apr-97	
AMPA2051	Plate AL7050-T7351, t= 3.25 inch, 36 x 96 inch	MP	AL7050-T7351	3.250	36.0	96.0	0.000	1125.7	22-Mar-97	

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Bay

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Bay	BayName	From BL(in)	To BL(in)	From STA(in)	To STA (in)	From WL(in)	To WL(in)	Notes
100	Fuselage under floor major zone	-52	52	144	621	0	25	Below floor to rear pressu
110	Major sub-zone under flight comprt	-52	52	144	235	0	35	
111	Radome	-30	30	144	169	13	35	
112	Generator bay	-13.7	-52	169	202.75	0	25	Nose compartment RHS
113	Brake/steering hydraulics	13.7	52	169	202.75	0	25	Nose compartment LHS
114	Flight controls under flight comprt RHS	-13.7	-52	202.75	235	0	25	
115	Flight controls under flight comprt LHS	13.7	52	202.75	235	0	25	
116	NLG well	13.7	-13.7	202.75	235	0	25	
120	Sub-zone under floor avionics & control	-52	52	235	280	0	25	
121	Under floor avionics & controls LHS	0	52	235	280	0	25	
122	Under floor avionics & controls RHS	0	-52	235	280	0	25	
130	Sub-zone under floor systems instl	-52	52	280	409	0	12	
131	Under floor systems instl LHS	0	52	280	409	0	12	
132	Under floor systems instl RHS	0	-52	280	409	0	12	
135	Fwd auxiliary fuel tank	-26	26	354	396	3	22	Fwd auxiliary tank capacit
140	Sub-zone under floor systems instl	-52	52	409	559	0	12	
143	MLG wheel well LHS	0	52	510	559	0	12	
144	MLG wheel well RHS	0	-52	510	559	0	12	
150	Rear auxiliary tank	-52	52	559	621	0	12	Rear auxiliary tank capaci
151	Rear auxiliary tank LHS	0	52	559	621	0	12	
152	Rear auxiliary tank RHS	0	-52	559	621	0	12	
180	Fwd fuselage fairing	0	52	350	409	-10	26	
190	Aft fuselage fairing	0	-52	409	621	-5	26	
200	Fuselage above floor	-52	52	169	621	25	104	
210	Nose compartment	-30	30	169	202.75	25	104	
211	Nose compartment LHS	0	30	169	202.75	25	104	
212	Nose compartment RHS	0	-30	169	202.75	25	104	
220	Flight compartment	-52	52	202.75	280	25	104	
221	Flight compartment LHS	15	52	202.75	280	25	104	
222	Flight compartment centre	-15	15	202.75	280	25	104	
223	Flight compartment RHS	-15	-52	202.75	280	25	104	
230	Cabin area	-52	52	280	310	25	104	
231	Cabin area LHS	0	52	280	310	25	104	
232	Cabin area RHS	0	-52	280	310	25	104	
240	Cabin area	-52	52	310	589	25	104	
241	Cabin area LHS	0	52	310	589	25	104	
242	Cabin area RHS	0	-52	310	589	25	104	
250	Cabin area	-52	52	589	621	25	104	
251	Cabin area LHS	0	52	589	621	25	104	
252	Cabin area RHS	0	-52	589	621	25	104	
300	Empennage	0	0	621	840	95	292	
310	Aft fuselage	-52	52	621	718	92	93.5	
311	Aft fuselage LHS	0	52	621	718	92	93.5	
312	Aft fuselage RHS	-52	52	621	718	92	93.5	
320	Vertical stabilizer and rudder	-10	10	718	840	95	212	
321	Vertical stabilizer	-10	10	718	840	95	212	
322	Rudder	-8	8	718	833	107	175	
330	Left horizontal stabilizer & elevator	0	115	802	905	186	200	
331	Left horizontal stabilizer	0	115	802	905	186	200	

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Drawings

20-Oct-98

DwgNumber	Drawing Name	T	Sh	Form	Iss	Designer name	Date	Update	WBS
3406/F-05-36	Insert check valve	DD	1	C	C	Shwab Rudi	28-Sep-97	24-Jul-98	12510
4656-10-D8	Hydraulic fuse	VD	1	C	A	Robinson Shaun	25-Jun-97	07-Jul-98	12470
4656-10-H7	Hydraulic fuse	VD	1	C	B	Robinson Shaun	13-Apr-97	22-Feb-98	12470
47765-1	Drain valve static	VD	1	C	D	Hurley Don	21-Oct-97	11-Jan-98	14000
6003042	Antiskid drive cap	DD	1	D	A	Robinson Shaun	30-Aug-97	27-Jun-98	12480
65-00-45/3D	Pitot tube	TD	1	D	B	Hurley Don	02-Jul-97	06-Mar-98	14000
8777-88G/F	Shuttle valve	VD	1	C	B	Robinson Shaun	15-Feb-97	15-Apr-98	12470
DPM061R002	Preffered Parts (Mechanical)	RD	48	A4	C	Long Peter	16-Nov-97	26-Jan-98	42210
DPM061R003	Preffered Parts (Electrical)	RD	39	A4	D	Casey Ella	25-Sep-97	27-Mar-98	42220
DPM0740000	Jig, Aircraft structure assy	JD	4	J	C	Heron Phillippe	15-Feb-97	10-Mar-98	35000
DPM0741000	Jig, Wing assy , LH & RH	JD	3	J	A	Burnett Alan	12-Apr-97	27-Dec-97	35100
DPM0741100	Jig, Wing torsion box assy , LH & RH	JD	3	J	B	Durand Jean	23-Oct-97	24-Jan-98	35100
DPM0741110	Jig, Fwd spar assy , LH & RH	JD	2	J	A	Durand Jean	18-Dec-97	09-Mar-98	35100
DPM0741111	Jig, Fwd inboard spar , LH & RH	JD	1	J	B	Durand Jean	26-Oct-97	14-Feb-98	35100
DPM0741112	Jig, Fwd outboard spar , LH & RH	JD	1	J	B	Durand Jean	23-Sep-97	23-Dec-97	35100
DPM0741113	Jig, Splice, fwd spar	JD	1	J	A	Durand Jean	11-Aug-97	21-Jul-98	35100
DPM0741120	Jig, Rear spar assy , LH & RH	JD	2	J	C	Thompson Robin	15-Mar-97	05-Mar-98	35100
DPM0741121	Jig, Rear inboard spar , LH & RH	JD	1	J	C	Thompson Robin	17-Feb-97	16-Feb-98	35100
DPM0741122	Jig, Rear outboard spar , LH & RH	JD	1	J	D	Thompson Robin	18-Jul-97	23-Jun-98	35100
DPM0741123	Jig, Splice, aft spar	JD	1	J	A	Thompson Robin	20-Apr-97	19-May-98	35100
DPM0741130	Jig, Rear auxiliary spar assy , LH & RH	JD	2	J	A	Short George	21-Oct-97	12-Apr-98	35100
DPM0741131	Jig, Rear auxiliary spar , LH & RH	JD	1	J	B	Short George	03-Sep-97	02-Dec-97	35100
DPM0741140	Jig, MLG aft spar assy , LH & RH	JD	2	J	B	Short George	13-Aug-97	03-Jul-98	35100
DPM0741141	Jig, MLG aft spar , LH & RH	JD	1	J	A	Short George	25-Jan-97	06-Oct-97	35100
DPM0741150	Jig, Spar 1 , LH & RH	JD	1	J	C	Burnett Alan	10-Jun-97	21-Oct-97	35100
DPM0741160	Jig, Spar 2 , LH & RH	JD	1	J	D	Burnett Alan	13-Jul-97	03-Mar-98	35100
DPM0741170	Jig, Spar 3 , LH & RH	JD	1	J	C	Burnett Alan	04-Oct-97	13-Jun-98	35100
DPM0741180	Jig, Spar 4 , LH & RH	JD	1	J	A	Short George	17-Feb-97	22-Feb-98	35100
DPM0741190	Jig, Spar 5 , LH & RH	JD	1	J	B	Short George	25-Mar-97	01-Mar-98	35100
DPM0741200	Jig, Spar 6 , LH & RH	JD	1	J	C	Durand Jean	27-Jan-97	16-Oct-97	35100
DPM0741210	Jig, Spar 7 , LH & RH	JD	1	J	A	Durand Jean	27-Feb-97	15-Apr-98	35100
DPM0741220	Jig, Spar 8 , LH & RH	JD	1	J	C	Durand Jean	24-Mar-97	23-Mar-98	35100
DPM0741230	Jig, Spar 9 , LH & RH	JD	1	J	C	Durand Jean	27-Apr-97	18-Dec-97	35100
DPM0741240	Jig, Spar 10 , LH & RH	JD	1	J	A	Thompson Robin	18-Mar-97	29-Jun-98	35100
DPM0741250	Jig, Spar 11 , LH & RH	JD	1	J	A	Thompson Robin	29-Aug-97	14-Jul-98	35100
DPM0741260	Jig, Spar 12 , LH & RH	JD	1	J	D	Thompson Robin	12-Nov-97	30-Apr-98	35100
DPM0741270	Jig, Spar 13 , LH & RH	JD	1	J	D	Thompson Robin	14-Sep-97	01-May-98	35100
DPM0741280	Jig, Spar 14 , LH & RH	JD	1	J	B	Burnett Alan	24-Aug-97	29-Jan-98	35100
DPM0741290	Jig, Spar 15 , LH & RH	JD	1	J	B	Burnett Alan	17-May-97	08-Feb-98	35100
DPM0741300	Jig, Spar 16 , LH & RH	JD	1	J	B	Danielsen Larry	22-Feb-97	23-Dec-97	35100
DPM0741310	Jig, Spar 17 , LH & RH	JD	1	J	C	Danielsen Larry	11-Jan-97	23-Jul-98	35100
DPM0741320	Jig, Spar 18 , LH & RH	JD	1	J	C	Danielsen Larry	27-Jun-97	16-Oct-97	35100
DPM0741410	Jig, Lower skin assy , LH & RH	JD	2	J	A	Stingo Roberto	19-Nov-97	17-Apr-98	35100
DPM0741411	Jig, Lower skin & panels, LH & RH	JD	1	J	D	Stingo Roberto	09-Aug-97	11-Mar-98	35100
DPM0741420	Jig, Lower skin assy , LH & RH	JD	2	J	B	Stingo Roberto	21-May-97	06-Mar-98	35100
DPM0741421	Jig, Lower skin & panels, LH & RH	JD	1	J	C	Stingo Roberto	12-Apr-97	26-Jul-98	35100
DPM0741430	Jig, Upper skin assy , LH & RH	JD	2	J	A	Danielsen Larry	13-Sep-97	15-Apr-98	35100
DPM0741431	Jig, Upper skin & panels, LH & RH	JD	1	J	D	Danielsen Larry	15-Oct-97	23-Mar-98	35100
DPM0741440	Jig, Upper skin assy , LH & RH	JD	2	J	B	Danielsen Larry	21-Mar-97	18-Dec-97	35100
DPM0741441	Jig, Upper skin & panels, LH & RH	JD	1	J	B	Danielsen Larry	26-Apr-97	26-Mar-98	35100
DPM0741511	Jig, Fwd inboard flap hinge , LH & RH	JD	1	J	B	Stingo Roberto	10-Jun-97	02-Feb-98	35100
DPM0741512	Jig, Fwd inboard flap hinge , LH & RH	JD	1	J	A	Stingo Roberto	13-Jul-97	09-May-98	35100
DPM0741700	Jig, Wing tip assy , LH & RH	JD	3	J	A	Stingo Roberto	04-Oct-97	16-Apr-98	35100

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AMO Rep Number DPM080R001 Report Name AMO (Advanced Material Order) Last rev B Date: 25-Oct-97
 Eng Name: Swayze Patrick Position: Production engineer Dept: 3461 Phone: 4856

MRD AMO report

AMO code: AMCA0001

MRD	Part Number	Description	Type Material	Thick ness	Width	Len	Diam	We ght	Date
A253WG1	DPM2530020-001	Plate Acrylic, t= 0.375 inch, 24 x 48 inch	CP Acrylic	0.375	24.0	48.0	0.000	13.0	01-Feb-97
A253WG1	DPM2530020-001	Plate Acrylic, t= 0.375 inch, 24 x 48 inch	CP Acrylic	0.375	24.0	48.0	0.000	13.0	01-Feb-97
A253WG2	DPM2530020-001	Plate Acrylic, t= 0.375 inch, 24 x 48 inch	CP Acrylic	0.375	24.0	48.0	0.000	13.0	01-Feb-97
A253WG2	DPM2530020-001	Plate Acrylic, t= 0.375 inch, 24 x 48 inch	CP Acrylic	0.375	24.0	48.0	0.000	13.0	01-Feb-97
A253WG3	DPM2530020-001	Plate Acrylic, t= 0.375 inch, 24 x 48 inch	CP Acrylic	0.375	24.0	48.0	0.000	13.0	01-Feb-97
A253WG3	DPM2530020-001	Plate Acrylic, t= 0.375 inch, 24 x 48 inch	CP Acrylic	0.375	24.0	48.0	0.000	13.0	01-Feb-97
A253WG4	DPM2530020-001	Plate Acrylic, t= 0.375 inch, 24 x 48 inch	CP Acrylic	0.375	24.0	48.0	0.000	13.0	01-Feb-97
A253WG4	DPM2530020-001	Plate Acrylic, t= 0.375 inch, 24 x 48 inch	CP Acrylic	0.375	24.0	48.0	0.000	13.0	01-Feb-97
A253WG5	DPM2530020-001	Plate Acrylic, t= 0.375 inch, 24 x 48 inch	CP Acrylic	0.375	24.0	48.0	0.000	13.0	01-Feb-97
A253WG5	DPM2530020-001	Plate Acrylic, t= 0.375 inch, 24 x 48 inch	CP Acrylic	0.375	24.0	48.0	0.000	13.0	01-Feb-97
A253WG6	DPM2530020-001	Plate Acrylic, t= 0.375 inch, 24 x 48 inch	CP Acrylic	0.375	24.0	48.0	0.000	13.0	01-Feb-97
A253WG6	DPM2530020-001	Plate Acrylic, t= 0.375 inch, 24 x 48 inch	CP Acrylic	0.375	24.0	48.0	0.000	13.0	01-Feb-97

AMO code: AMCC0001

MRD	Part Number	Description	Type Material	Thick ness	Width	Len	Diam	We ght	Date
A310LE4L	DPM3104104-001	Sheet Composite, t= 0.11 inch, 48 x 96 inch	CP Composite	0.110	48.0	96.0	0.000	15.2	03-Apr-97
A310LE4R	DPM3104104-002	Sheet Composite, t= 0.11 inch, 48 x 96 inch	CP Composite	0.110	48.0	96.0	0.000	15.2	03-Apr-97
A310LE6L	DPM3104106-001	Sheet Composite, t= 0.11 inch, 48 x 96 inch	CP Composite	0.110	48.0	96.0	0.000	15.2	03-Apr-97
A310LE6R	DPM3104106-002	Sheet Composite, t= 0.11 inch, 48 x 96 inch	CP Composite	0.110	48.0	96.0	0.000	15.2	03-Apr-97
A310LE7L	DPM3104107-001	Sheet Composite, t= 0.11 inch, 48 x 96 inch	CP Composite	0.110	48.0	96.0	0.000	15.2	03-Apr-97
A310LE7R	DPM3104107-002	Sheet Composite, t= 0.11 inch, 48 x 96 inch	CP Composite	0.110	48.0	96.0	0.000	15.2	03-Apr-97

AMO code: AMCC0011

MRD	Part Number	Description	Type Material	Thick ness	Width	Len	Diam	We ght	Date
A121FL	DPM1214110-001	Plate Composite, t= 0.25 inch, 48 x 96 inch	CP Composite	0.250	48.0	96.0	0.000	34.6	16-Feb-97
A121FR	DPM1214110-002	Plate Composite, t= 0.25 inch, 48 x 96 inch	CP Composite	0.250	48.0	96.0	0.000	34.6	16-Feb-97
A121LEL	DPM1214210-001	Plate Composite, t= 0.25 inch, 48 x 96 inch	CP Composite	0.250	48.0	96.0	0.000	34.6	16-Feb-97
A121LER	DPM1214210-002	Plate Composite, t= 0.25 inch, 48 x 96 inch	CP Composite	0.250	48.0	96.0	0.000	34.6	16-Feb-97
A121TEL	DPM1214220-001	Plate Composite, t= 0.25 inch, 48 x 96 inch	CP Composite	0.250	48.0	96.0	0.000	34.6	16-Feb-97
A121TER	DPM1214220-002	Plate Composite, t= 0.25 inch, 48 x 96 inch	CP Composite	0.250	48.0	96.0	0.000	34.6	16-Feb-97
A121WFL	DPM1214230-001	Plate Composite, t= 0.25 inch, 48 x 96 inch	CP Composite	0.250	48.0	96.0	0.000	34.6	16-Feb-97
A121WFR	DPM1214230-002	Plate Composite, t= 0.25 inch, 48 x 96 inch	CP Composite	0.250	48.0	96.0	0.000	34.6	16-Feb-97

AMO code: AMCC0012

MRD	Part Number	Description	Type Material	Thick ness	Width	Len	Diam	We ght	Date
A121WLE	DPM1214240-001	Plate Composite, t= 0.25 inch, 48 x 96 inch	CP Composite	0.250	48.0	96.0	0.000	34.6	27-Mar-97
A121WLE	DPM1214240-002	Plate Composite, t= 0.25 inch, 48 x 96 inch	CP Composite	0.250	48.0	96.0	0.000	34.6	27-Mar-97
A121WTE	DPM1214250-001	Plate Composite, t= 0.25 inch, 48 x 96 inch	CP Composite	0.250	48.0	96.0	0.000	34.6	27-Mar-97
A121WTE	DPM1214250-002	Plate Composite, t= 0.25 inch, 48 x 96 inch	CP Composite	0.250	48.0	96.0	0.000	34.6	27-Mar-97
A141LE1L	DPM1414110-001	Plate Composite, t= 0.25 inch, 48 x 96 inch	CP Composite	0.250	48.0	96.0	0.000	34.6	27-Mar-97
A141LE1R	DPM1414110-002	Plate Composite, t= 0.25 inch, 48 x 96 inch	CP Composite	0.250	48.0	96.0	0.000	34.6	27-Mar-97
A141LE2L	DPM1414120-001	Plate Composite, t= 0.25 inch, 48 x 96 inch	CP Composite	0.250	48.0	96.0	0.000	34.6	27-Mar-97
A141LE2R	DPM1414120-002	Plate Composite, t= 0.25 inch, 48 x 96 inch	CP Composite	0.250	48.0	96.0	0.000	34.6	27-Mar-97
A141LE3L	DPM1414140-001	Plate Composite, t= 0.25 inch, 48 x 96 inch	CP Composite	0.250	48.0	96.0	0.000	34.6	27-Mar-97
A141LE3R	DPM1414140-002	Plate Composite, t= 0.25 inch, 48 x 96 inch	CP Composite	0.250	48.0	96.0	0.000	34.6	27-Mar-97

AMO code: AMCC0013

MRD	Part Number	Description	Type Material	Thick ness	Width	Len	Diam	We ght	Date
A141LE4L	DPM1414160-001	Plate Composite, t= 0.25 inch, 48 x 96 inch	CP Composite	0.250	48.0	96.0	0.000	34.6	11-Feb-97
A141LE4R	DPM1414160-002	Plate Composite, t= 0.25 inch, 48 x 96 inch	CP Composite	0.250	48.0	96.0	0.000	34.6	11-Feb-97

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Components list

MRD	Part Number	Manufacturer	Vendor Part Number	Supplier	Lead time, in days	Price in \$	Des gn Eng	Components				Sta tus	Date	Status: 1-permitted, 2-salvage and 3 -forbidded to use Preference to use components is 1	Remarks	
								Man uf Eng	Pro cef	Pro cef	Pro cef					
F015	3408/F-05-36	Stock valve	3408/F-05-36	Stock valve	30	\$5.12	621	1	89	1	75	1	9	1	22-Apr-97	P/n 3408/F-05-36, manufacturer 'Stock valve', supplier 'Stock valve' were chosen taking into consideration it technical data, low price and long lead time advantage.
F015	3408/F-05-36	Stock valve	3408/F-05-36	Hydro power	40	\$5.38	621	1	89	2	75	2	9	3	22-Apr-97	P/n 3408/F-05-36, manufacturer 'Stock valve', supplier 'Hydro power' were not chosen taking into consideration it technical data, higher price and long lead time
F018	3408/F-05-36	Stock valve	3408/F-05-36	Stock valve	30	\$5.12	621	1	89	1	75	1	9	1	22-Apr-97	P/n 3408/F-05-36, manufacturer 'Stock valve', supplier 'Stock valve' were chosen taking into consideration it technical data, low price and long lead time advantage.
F018	3408/F-05-36	Stock valve	3408/F-05-36	Hydro power	40	\$5.38	621	1	89	2	75	2	9	3	22-Apr-97	P/n 3408/F-05-36, manufacturer 'Stock valve', supplier 'Hydro power' were not chosen taking into consideration it technical data, higher price and long lead time
H737	4658-10-D8-02	Hydro power	4658-10-D8	Hydro power	40	\$70.93	617	1	87	2	75	1	9	1	05-Mar-97	P/n 4658-10-D8-02, manufacturer 'Hydro power', supplier 'Hydro power' were chosen taking into consideration it technical data and low price advantage.
H738	4658-10-D8-02	Hydro power	4658-10-D8	Hydro power	40	\$70.93	617	1	87	2	75	1	9	1	05-Mar-97	P/n 4658-10-D8-02, manufacturer 'Hydro power', supplier 'Hydro power' were chosen taking into consideration it technical data and low price advantage.
H709	4658-10-H7-03	Hydro power	4658-10-H7	Hydro power	60	\$71.31	617	1	87	1	75	1	9	1	01-May-97	P/n 4658-10-H7-03, manufacturer 'Hydro power', supplier 'Hydro power' were chosen taking into consideration it technical data, low price and long lead
H710	4658-10-H7-03	Hydro power	4658-10-H7	Hydro power	60	\$71.31	617	1	87	1	75	1	9	1	01-May-97	P/n 4658-10-H7-03, manufacturer 'Hydro power', supplier 'Hydro power' were chosen taking into consideration it technical data, low price and long lead
J089	47765-1	Data instrument	47765-1	Data instrument	30	\$121.98	650	1	88	1	75	1	9	1	29-Mar-97	P/n 47765-1, manufacturer 'Data instrument', supplier 'Data instrument' were chosen taking into consideration it technical data, low price and long lead time advantage.
J089	47765-1	Data instrument	47765-1	Air instrument	45	\$137.81	650	1	88	2	75	2	9	3	29-Mar-97	P/n 47765-1, manufacturer 'Data instrument', supplier 'Air instrument' were not chosen taking into consideration it technical data, higher price and long lead time
J090	47765-1	Data instrument	47765-1	Data instrument	30	\$121.98	650	1	88	1	75	1	9	1	29-Mar-97	P/n 47765-1, manufacturer 'Data instrument', supplier 'Data instrument' were chosen taking into consideration it technical data, low price and long lead time advantage.
J090	47765-1	Data instrument	47766-1	Air instrument	45	\$137.81	650	1	88	2	75	2	9	3	29-Mar-97	P/n 47765-1, manufacturer 'Data instrument', supplier 'Air instrument' were not chosen taking into consideration it technical data, higher price and long lead time
J091	47765-1	Data instrument	47765-1	Data instrument	30	\$121.98	650	1	88	1	75	1	9	1	29-Mar-97	P/n 47765-1, manufacturer 'Data instrument', supplier 'Data instrument' were chosen taking into consideration it technical data, low price and long lead time advantage.

Grounding Report Number: DPM765R001 Report Name Electromagnetic compatibility substantiation

Last revision: B Date: 27-Feb-98

Grounding report

GR0019 C501	GR0019 C501	GR0020 C503	GR0020 C503	GR0021 C504	GR0021 C504	GR0022 C505	GR0022 C505	GR0023 C506	GR0023 C506	GR0024 C507	GR0024 C507
DPM413010CDPM4130100-501	DPM4130101DPM4130101-501	DPM4130111DPM4130111-501	DPM4130111CDPM4130111-501	DPM4130111CDPM4130111-502	DPM4130111DPM4130111-502	DPM413012CDPM4130120-501	DPM413012CDPM4130120-501	DPM413012CDPM4130120-502	DPM413012CDPM4130120-502	DPM413013CDPM4130130-501	DPM413013CDPM4130130-501
Slat rotary actuator	Slat rotary actuator	Slat ball screw actuator	Slat ball screw actuator	Slat ball screw actuator	Slat ball screw actuator	Slat ball screw actuator	Slat ball screw actuator	Slat ball screw actuator	Slat ball screw actuator	Slat ball screw actuator	Slat ball screw actuator
MechanicFlight control	MechanicFlight control	MechanicFlight control	MechanicFlight control	MechanicFlight control	MechanicFlight control	MechanicFlight control	MechanicFlight control	MechanicFlight control	MechanicFlight control	MechanicFlight control	MechanicFlight control
Slat	Slat	Slat	Slat	Slat	Slat	Slat	Slat	Slat	Slat	Slat	Slat
AFR26B	AFR26B	A120BF2LDPM1200012	A120BF2LDPM1200012	A120BF2LDPM1200012	A120BF2LDPM1200012	A120BF2LDPM1200012	A120BF2LDPM1200012	A120BF2LDPM1200012	A120BF2LDPM1200012	A120BF2LDPM1200012	A120BF2LDPM1200012
DPM2230071	DPM2230071	DPM1200012	DPM1200012	DPM1200012	DPM1200012	DPM1200012	DPM1200012	DPM1200012	DPM1200012	DPM1200012	DPM1200012
Frame 26 lower, (centre-wing)	Frame 26 lower, (centre-wing)	Fwd outboard spar, LH	Fwd outboard spar, LH	Fwd outboard spar, LH	Fwd outboard spar, LH	Fwd outboard spar, LH	Fwd outboard spar, LH	Fwd outboard spar, LH	Fwd outboard spar, LH	Fwd outboard spar, LH	Fwd outboard spar, LH
Stud	Stud	Contact	Contact	Contact	Contact	Contact	Contact	Contact	Contact	Contact	Contact
0.003	0.003	0.002	0.002	0.009	0.009	0.003	0.003	0.003	0.003	0.002	0.002
Clean an attachment area of structure part AFR26B and finish with Iridite for unit C501 attachment	Clean an attachment area of structure part AFR26B and finish with Iridite for unit C501 attachment	Clean an attachment area of structure part A120BF2L and finish with Iridite for unit C503 attachment	Clean an attachment area of structure part A120BF2L and finish with Iridite for unit C503 attachment	Clean an attachment area of structure part A120BF2R and finish with Iridite for unit C504	Clean an attachment area of structure part A120BF2R and finish with Iridite for unit C504	Clean an attachment area of structure part A120BF2L and finish with Iridite for unit C505 attachment	Clean an attachment area of structure part A120BF2L and finish with Iridite for unit C505 attachment	Clean an attachment area of structure part A120BF2R and finish with Iridite for unit C506	Clean an attachment area of structure part A120BF2R and finish with Iridite for unit C506	Clean an attachment area of structure part A120BF2L and finish with Iridite for unit C507 attachment	Clean an attachment area of structure part A120BF2L and finish with Iridite for unit C507 attachment

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FAR regulations

FAR	Amendment	FAR Description
25.0000.A		Subpart A - General
25.0001		Applicability
25.0002		Special retroactive requirements
25.002 .B		Subpart B - Flight
25.0020		General
25.0021		Proof of compliance
25.0023		Load distribution limits
25.0025		Weight limits
25.0027		Center of gravity limits
25.0029		Empty weight and corresponding center of gravity
25.0031		Removable ballast
25.0033		Propeller speed and pitch limits
25.0100		Performance
25.0101		General
25.0103		Stalling speed
25.0105		Takeoff
25.0107		Takeoff speed
25.0109		Accelerate-stop distance
25.0111		Takeoff path
25.0113		Takeoff distance and takeoff run
25.0115		Takeoff flight path
25.0117		Climb: general
25.0119		Landing climb: All-engine-operating
25.0121		Climb: One-engine-operative
25.0123		En route flight paths
25.0125		Landing
25.0140		Controllability and Maneuverability
25.0143		General
25.0145		Longitudinal control
25.0147		Directional and lateral control
25.0149		Minimum control speed
25.0160		Trim
25.0161		Trim
25.0170		Stability
25.0171		General
25.0173		Static longitudinal stability
25.0175		Demonstration of static longitudinal stability
25.0177		Static lateral-directional stability
25.0181		Dynamic stability
25.0200		Stalls
25.0201		Stall demonstration
25.0203		Stall characteristics
25.0207		Stall warning
25.0230		Ground and Water Handling Characteristics
25.0231		Longitudinal stability and control
25.0233		Directional stability and control
25.0235		Taxiing condition
25.0237		Wind velocities
25.0239		Spray characteristics, control, and stability on water
25.0250		Miscellaneous Flight Requirements
25.0251		Vibration and buffeting
25.0253		High-speed characteristics
25.0255		Out-of-trim characteristics

Access Door without matching parts for maintenance

Door	Door Part Number	Door Attachment	Map Dwg Number	Report Number	Notes
116-AZ	DPM2121110-012	22 pan head 3/16" bolts	DPM1010012	DPM101R005	Access to untatch panel 112-AR
140-AL	DPM2720100-501	32 csk 3/16" bolts	DPM1010012	DPM101R005	Overwing-to-fuselage side fairing (left forward)
140-AR	DPM2720100-502	32 csk 3/16" bolts	DPM1010012	DPM101R005	Overwing-to-fuselage side fairing (right forward)
140-BL	DPM2720200-001	32 csk 3/16" bolts	DPM1010012	DPM101R005	Overwing-to-fuselage side fairing (left centre)
140-BR	DPM2720200-002	32 csk 3/16" bolts	DPM1010012	DPM101R005	Overwing-to-fuselage side fairing (right centre)
140-FL	DPM2222101-011	12 csk 3/16" bolts	DPM1010012	DPM101R005	Wing attachment
140-JR	DPM2212221-012	11 csk 3/16" bolts	DPM1010012	DPM101R005	Wing attachment
190-AL	DPM2720500-001	73 csk 3/16" bolts	DPM1010012	DPM101R005	Rear wing-to-fuselage fairing (left)
190-AR	DPM2720500-002	73 csk 3/16" bolts	DPM1010012	DPM101R005	Rear wing-to-fuselage fairing (right)
190-BB	DPM2720600-001	49 csk 3/16" bolts	DPM1010012	DPM101R005	Rear wing-to-fuselage fairing (centre)
190-BL	DPM2720510-001	13 csk 3/16" bolts	DPM1010012	DPM101R005	Hydraulic system access
190-BR	DPM2720510-002	13 csk 3/16" bolts	DPM1010012	DPM101R005	Hydraulic system access/ground overboard
190-DR	DPM2720520-001	12 csk 3/16" bolts	DPM1010012	DPM101R005	Hydraulic system service
221-AL	DPM2132101-021	4 csk 3/16" bolts	DPM1010012	DPM101R005	Main entrance door area external light
222-CZ	DPM2134221-001	28 csk head 3/16" bolts	DPM1010012	DPM101R005	Controls & instruments under centre pedestal
222-DZ	DPM2134221-002	28 csk head 3/16" bolts	DPM1010012	DPM101R005	Controls & instruments under centre pedestal
241-CX	DPM8123001-004	pins & 4 csk head 3/16" bolts	DPM1010012	DPM101R005	Interior lavatory sta 510 - 559 partition
251-AX	DPM8125001-004	pins & 4 csk head 3/16" bolts	DPM1010012	DPM101R005	Interior baggage compartment partition
311-AL	DPM2312101-011	2 axds & 2 latches	DPM1010012	DPM101R005	APU control panel & ground air supply connection
321-ET	DPM3104102-001	21 csk head 3/16" bolts	DPM1010012	DPM101R005	Upper forward
321-KT	DPM3104103-001	68 csk head 3/16" bolts	DPM1010012	DPM101R005	Upper mid
322-DR	DPM3202101-042	14 csk head 3/16" bolts	DPM1010012	DPM101R005	Rudder power control units (PCU) rod end assembly
331-AB	DPM3104108-001	8 csk head 3/16" bolts	DPM1010012	DPM101R005	Left leading edge visor
331-DL	DPM3304102-001	62 csk head 3/16" bolts	DPM1010012	DPM101R005	Tip
332-AB	DPM3402101-031	13 csk head 3/16" bolts	DPM1010012	DPM101R005	Elevator hinge No. 1 & power control unit attachment
341-AB	DPM3104108-002	8 csk head 3/16" bolts	DPM1010012	DPM101R005	Right leading edge visor
341-DR	DPM3304102-002	62 csk head 3/16" bolts	DPM1010012	DPM101R005	Tip
342-AB	DPM3402101-032	13 csk head 3/16" bolts	DPM1010012	DPM101R005	Elevator hinge No. 1 & power control unit attachment
351-AB	DPM2730100-001	58 csk head 3/16" bolts	DPM1010012	DPM101R005	Tail tank lower fairing
414-BB	DPM2354300-501	16 csk head 3/16" bolts	DPM1010012	DPM101R005	Thrust reverser tracks
414-BT	DPM2354400-501	16 csk head 3/16" bolts	DPM1010012	DPM101R005	Thrust reverser tracks
414-CB	DPM2354500-501	24 csk head 3/16" bolts	DPM1010012	DPM101R005	Lower cover assembly - Inner
414-CT	DPM2354600-501	24 csk head 3/16" bolts	DPM1010012	DPM101R005	Upper cover assembly - Inner
415-AL	DPM2355000-501	3 bolts	DPM1010012	DPM101R005	Tailpipe fairing
424-BB	DPM2354300-502	16 csk head 3/16" bolts	DPM1010012	DPM101R005	Thrust reverser tracks
424-BT	DPM2354400-502	16 csk head 3/16" bolts	DPM1010012	DPM101R005	Thrust reverser tracks
424-CB	DPM2354500-502	24 csk head 3/16" bolts	DPM1010012	DPM101R005	Lower cover assembly - Inner
424-CT	DPM2354600-502	24 csk head 3/16" bolts	DPM1010012	DPM101R005	Upper cover assembly - Inner
425-AR	DPM2355000-502	3 bolts	DPM1010012	DPM101R005	Tailpipe fairing
430-AB	DPM2342121-015	34 csk head 3/16" bolts	DPM1010012	DPM101R005	Power plant forward mount nacelle pylon section
430-AL	DPM2342321-025	27 csk head 3/16" bolts	DPM1010012	DPM101R005	Leading edge structural inspection
430-AT	DPM2342221-013	29 csk head 3/16" bolts	DPM1010012	DPM101R005	Power plant forward mount
430-BB	DPM2342121-021	16 csk head 3/16" bolts	DPM1010012	DPM101R005	Power plant lines disconnect
430-BL	DPM2342421-011	37 csk head 3/16" bolts	DPM1010012	DPM101R005	Trailing edge structural inspection
430-CT	DPM2342221-017	15 csk head 3/16" bolts	DPM1010012	DPM101R005	Power plant rear mount
430-FB	DPM2342121-037	19 csk head 3/16" bolts	DPM1010012	DPM101R005	Power plant rear mount
430-GB	DPM2342421-019	14 csk head 3/16" bolts	DPM1010012	DPM101R005	Nacelle/pylon services
430-HB	DPM2342421-022	9 csk head 3/16" bolts	DPM1010012	DPM101R005	Pylon structural inspection
440-AB	DPM2342121-016	34 csk head 3/16" bolts	DPM1010012	DPM101R005	Power plant forward mount nacelle pylon section
440-AL	DPM2342321-026	27 csk head 3/16" bolts	DPM1010012	DPM101R005	Leading edge structural inspection

04-Jul-99

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DFMA operation

Number	Operation	Tool	N	ID	Definition
7	Assembly status		0	700	Is not secured on insertion
7	Assembly status		1	701	Is secured immediately on insertion
8	Securing operation		0	800	Threaded fastening
8	Securing operation		1	801	A snap fit
8	Securing operation		2	802	A push fit
8	Securing operation		3	803	A press fit
8	Securing operation		4	804	An interference fit
8	Securing operation		5	805	Riveting
8	Securing operation		6	806	Self stick
8	Securing operation		7	807	Crimpling
8	Securing operation		8	808	Staking
8	Securing operation		9	809	Bending
8	Securing operation		10	810	Tab twisting
8	Securing operation		11	811	An electrical connection
8	Securing operation		12	812	Spot welding
8	Securing operation		13	813	Soldering
9	Snap fit operation		0	900	Rigid
9	Snap fit operation		1	901	Pliable
10	Number of snaps		0	1000	Changed number of snaps
10	Number of snaps		1	1001	Default number of snaps
11	Electrical connection type		0	1100	A friction connector
11	Electrical connection type		1	1101	A latch or snap
11	Electrical connection type		2	1102	A quick connect
11	Electrical connection type		3	1103	A ring lug with screw
11	Electrical connection type		4	1104	Secure and solder
11	Electrical connection type		5	1105	A bayonet
11	Electrical connection type		6	1106	A spring clip
11	Electrical connection type		7	1107	Wire wrap
11	Electrical connection type		8	1108	A fork or ring lug with nut
11	Electrical connection type		9	1109	A screw
11	Electrical connection type		10	1110	Two screws
11	Electrical connection type		11	1111	A fork lug with screw
11	Electrical connection type		12	1112	A wire with screw
12	Threaded fastening	Power tool	0	1200	No power tool is used
12	Threaded fastening	Power tool	1	1201	A power tool is used
13	Threaded fastening		0	1300	Requires less than 5 revolutions
13	Threaded fastening		1	1301	Requires more than 5 revolutions
15	Threaded fastening	Power tool	0	1500	A power tool with auto feed
15	Threaded fastening	Power tool	1	1501	A manual feed power tool
15	Threaded fastening	Hand tool	2	1502	A nut driver, screwdriver, or ratchet wrench
15	Threaded fastening	Hand tool	3	1503	Open or box end wrench
15	Threaded fastening	Hand tool	4	1504	Hand tightening
15	Threaded fastening	Hand tool	0	1600	A hand tool is used
16	Riveting	Power tool	1	1601	A power tool is used
16	Riveting		0	1700	Not yet considered
17	Minimum criteria		1	1701	Item is the first entry
17	Minimum criteria		2	1702	Item is a fastener
17	Minimum criteria		3	1703	Item is a connector
17	Minimum criteria		4	1704	Item has another function
17	Minimum criteria		0	1800	Different material
18	Minimum criteria				

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Report Number: DPM082R003 Report Name: Line Replacement Units (LRU) substantiation Last revision: C Date: 30-Oct-88
 Eng Name: Tomado Mary Position: LRU engineer Dept: 2383 Phone: 3025

Line Replacement Units (LRU) report

M/RD	Dwg Number	Part Number	Part Name	Width Inch	Len Inch	Hgt Inch	Dia Inch	Thick Inch	Material	Wgt lb	IntPartNumber	BL CG	STA CG	WL CG	Map Drawing Number	Map System Report
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System: Avionics

Subsystem: Audio																
Subsystems: Entertainment																
R612	DPM7630010	DPM7630010-001	Compact disk	8.57	20.48	9.38						8.38	DPM7921000-50233.9	515.5	50.3	DPM7630002 DPM763R003
R612	DPM7630011	DPM7630011-001	Compact disk	8.57	20.48	9.38						8.87	DPM7921002-50233.9	515.5	50.3	DPM7630002 DPM763R003

Subsystem: Communication

Subsystems: Filephone																
R201	DPM7624010	DPM7624010-501	Receiver/transmitter, file	6.24	9.44	7.38						18.82	DPM7921000-50224.0	528.2	33.0	DPM7624001 DPM762R005
R201	DPM7624011	DPM7624011-501	Receiver/transmitter, file	6.24	9.44	7.38						20.99	DPM7921002-50224.0	528.2	33.0	DPM7624001 DPM762R005
R211	DPM7624050	DPM7624050-501	Filephone antenna	0.93	1.21	0.87						0.42	DPM7922000-501	0.0	563.4	-7.9 DPM7624001 DPM762R005
R211	DPM7624051	DPM7624051-501	Filephone antenna	0.93	1.21	0.87						0.46	DPM7922002-501	0.0	563.4	-7.9 DPM7624001 DPM762R005

Subsystems: HF 1

R101	DPM7623008	DPM7623008-001	HF receiver	3.64	7.38	1.97						7.84	DPM7941002-501	2.4	768.3	111.4 DPM7623001 DPM762R003
R101	DPM7623009	DPM7623009-001	HF receiver	3.64	7.38	1.97						7.14	DPM7941000-501	2.4	768.3	111.4 DPM7623001 DPM762R003
R103	DPM7623010	DPM7623010-001	HF control unit	5.47	13.67	7.75						1.20	DPM7912530-501	3.6	276.5	27.8 DPM7623001 DPM762R003
R103	DPM7623015	DPM7623015-001	HF control unit	5.47	13.67	7.75						1.28	DPM7912535-501	3.6	276.5	27.8 DPM7623001 DPM762R003
R105	DPM7623011	DPM7623011-001	P/A antenna coupler	5.77	39.50	5.88						1.28	DPM7941000-501	2.1	781.3	105.1 DPM7623001 DPM762R003
R105	DPM7623016	DPM7623016-001	P/A antenna coupler	5.77	39.50	5.88						1.37	DPM7941002-501	2.1	781.3	105.1 DPM7623001 DPM762R003
R106	DPM7623018	DPM7623018-001	P/A antenna coupler	5.77	39.50	5.88						2.32	DPM7941000-501	0.0	767.5	158.9 DPM7623001 DPM762R003
R115	DPM7623014	DPM7623014-001	HF notch antenna	3.38	45.88	3.02						2.48	DPM7941002-501	0.0	767.5	158.9 DPM7623001 DPM762R003
R115	DPM7623017	DPM7623017-001	HF notch antenna	3.38	45.88	3.02										

Subsystems: HF 2

R102	DPM7623008	DPM7623008-001	HF receiver	3.64	7.38	1.97						7.84	DPM7941002-502	-2.4	768.3	111.4 DPM7623002 DPM762R003
R102	DPM7623009	DPM7623009-001	HF receiver	3.64	7.38	1.97						7.14	DPM7941000-502	-2.4	768.3	111.4 DPM7623002 DPM762R003
R104	DPM7623010	DPM7623010-001	HF control unit	5.47	13.67	7.75						1.20	DPM7912530-501	-3.6	276.5	27.8 DPM7623002 DPM762R003
R104	DPM7623015	DPM7623015-001	HF control unit	5.47	13.67	7.75						1.28	DPM7912535-501	-3.6	276.5	27.8 DPM7623002 DPM762R003
R106	DPM7623011	DPM7623011-001	P/A antenna coupler	5.77	39.50	5.88						1.28	DPM7941000-502	-2.1	781.3	105.1 DPM7623002 DPM762R003
R106	DPM7623016	DPM7623016-001	P/A antenna coupler	5.77	39.50	5.88						1.37	DPM7941002-502	-2.1	781.3	105.1 DPM7623002 DPM762R003

Subsystems: SATCOM

R261	DPM7625013	DPM7625013-001	Control unit data, SATCO	2.28	8.55	7.63						6.21	DPM7921000-50240.0	550.6	81.3	DPM7625001 DPM762R007
R261	DPM7625014	DPM7625014-001	Control unit data, SATCO	2.28	8.55	7.63						6.65	DPM7921002-50240.0	550.6	81.3	DPM7625001 DPM762R007

SECRET - ST 422709

Report Number: DPM080R005 Report Name: Long Lead Items (LLI) substantiation Last revision: B Date: 07-Aug-97
 Eng Name: Milton Betty Position: Production engineer Dept: 3481 Phone: 4889

Long Lead Items (LLI) report

MRD	Dwg Number	Part Number	Part Name	Width Inch	Len Inch	Hdg ht, in	Die Thick mat, in	Material	Wdg ht, in	InstPartNumber	BL CG, inch	STA CG, inch	WL CG, inch	Map Drawing Number	Map System Report
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System: Structure

Subsystem: Empennage

Subsystems: Elevator															
A340BFL	DPM3400001	DPM3400001-001	Elevator front spar, LH	3.90	106.70	3.25	0.00	3.250	AL7075-T7	13.32	DPM3400000-50152.5	921.5	185.0	DPM3000001	DPM045R001
A340BRL	DPM3400002	DPM3400002-001	Elevator rear spar, LH	2.80	104.90	3.25	0.00	3.250	AL7075-T7	11.83	DPM3400000-50152.5	906.2	185.0	DPM3000001	DPM045R001
A340BRR	DPM3400002	DPM3400002-002	Elevator rear spar, RH	2.80	104.90	3.25	0.00	3.250	AL7075-T7	11.83	DPM3400000-50252.5	906.2	185.0	DPM3000001	DPM045R001
A340SL	DPM3402101	DPM3402101-001	Elevator skin, LH	20.00	95.00	0.08	0.00	0.063	AL2024-T3	22.82	DPM3402100-50152.5	878.0	182.8	DPM3000001	DPM045R001
A340SR	DPM3402101	DPM3402101-002	Elevator skin, RH	20.00	95.00	0.08	0.00	0.063	AL2024-T3	22.82	DPM3402100-50252.5	878.0	182.8	DPM3000001	DPM045R001

Subsystem: Horizontal stabilizer

Subsystems: Horizontal stabilizer																
A330B01L	DPM3300010	DPM3300010-001	Spar 1, LH	2.75	55.00	4.72	0.00	2.750	AL7075-T7	6.75	DPM3300000-501	4.0	842.5	185.0	DPM3000001	DPM045R001
A330B01R	DPM3300010	DPM3300010-002	Spar 1, RH	2.75	55.00	4.72	0.00	2.750	AL7075-T7	6.75	DPM3300000-502	4.0	842.5	185.0	DPM3000001	DPM045R001
A330B02L	DPM3300020	DPM3300020-001	Spar 2, LH	0.88	11.60	4.72	0.00	0.080	AL2024-T3	0.90	DPM3300000-501	8.5	828.8	185.0	DPM3000001	DPM045R001
A330B02R	DPM3300020	DPM3300020-002	Spar 2, RH	0.88	11.60	4.72	0.00	0.080	AL2024-T3	0.90	DPM3300000-502	8.5	828.8	185.0	DPM3000001	DPM045R001
A330B03L	DPM3300030	DPM3300030-001	Spar 3, LH	2.75	24.30	4.72	0.00	2.750	AL7075-T7	2.88	DPM3300000-50112.1	838.5	185.0	DPM3000001	DPM045R001	
A330B03R	DPM3300030	DPM3300030-002	Spar 3, RH	2.75	24.30	4.72	0.00	2.750	AL7075-T7	2.88	DPM3300000-50212.1	838.5	185.0	DPM3000001	DPM045R001	
A330B08L	DPM3300080	DPM3300080-001	Spar 8, LH	0.88	30.90	4.24	0.00	0.080	AL2024-T3	2.22	DPM3300000-50158.2	882.5	185.0	DPM3000001	DPM045R001	
A330B08R	DPM3300080	DPM3300080-002	Spar 8, RH	0.88	30.90	4.24	0.00	0.080	AL2024-T3	2.22	DPM3300000-50258.2	882.5	185.0	DPM3000001	DPM045R001	
A330B10L	DPM3300100	DPM3300100-001	Spar 10, LH	0.88	28.80	4.18	0.00	0.080	AL2024-T3	2.04	DPM3300000-50168.2	868.8	185.0	DPM3000001	DPM045R001	
A330B10R	DPM3300100	DPM3300100-002	Spar 10, RH	0.88	28.80	4.18	0.00	0.080	AL2024-T3	2.04	DPM3300000-50268.2	868.8	185.0	DPM3000001	DPM045R001	
A330B13L	DPM3300130	DPM3300130-001	Spar 13, LH	0.88	21.90	3.92	0.00	0.080	AL2024-T3	1.48	DPM3300000-50197.7	907.1	185.0	DPM3000001	DPM045R001	
A330B13R	DPM3300130	DPM3300130-002	Spar 13, RH	0.88	21.90	3.92	0.00	0.080	AL2024-T3	1.48	DPM3300000-50297.7	907.1	185.0	DPM3000001	DPM045R001	
A330B14L	DPM3300140	DPM3300140-001	Spar 14, LH	0.88	19.80	3.84	0.00	0.080	AL2024-T3	1.33	DPM3300000-50104.1	873.4	185.0	DPM3000001	DPM045R001	
A330B14R	DPM3300140	DPM3300140-002	Spar 14, RH	0.88	19.80	3.84	0.00	0.080	AL2024-T3	1.33	DPM3300000-50204.1	873.4	185.0	DPM3000001	DPM045R001	
A330BAL	DPM3300002	DPM3300002-001	Horizontal stabilizer aft sp	2.75	121.20	4.72	0.00	2.750	AL7075-T7	14.85	DPM3300000-50157.0	898.6	185.0	DPM3000001	DPM045R001	
A330BAR	DPM3300002	DPM3300002-002	Horizontal stabilizer aft sp	2.75	121.20	4.72	0.00	2.750	AL7075-T7	14.85	DPM3300000-50257.0	898.6	185.0	DPM3000001	DPM045R001	
A330BFL	DPM3300001	DPM3300001-001	Horizontal stabilizer front	2.75	139.30	4.72	0.00	2.750	AL7075-T7	17.08	DPM3300000-50157.0	855.3	185.0	DPM3000001	DPM045R001	
A330BFR	DPM3300001	DPM3300001-002	Horizontal stabilizer front	2.75	139.30	4.72	0.00	2.750	AL7075-T7	17.08	DPM3300000-50257.0	855.3	185.0	DPM3000001	DPM045R001	
A330SL	DPM3302101	DPM3302101-001	Lower skin, LH	106.00	112.20	0.08	0.00	0.063	AL2024-T3	55.33	DPM3302100-50157.0	871.1	185.0	DPM3000001	DPM045R001	
A330SR	DPM3302101	DPM3302101-002	Lower skin, RH	106.00	112.20	0.08	0.00	0.063	AL2024-T3	55.33	DPM3302100-50257.0	871.1	185.0	DPM3000001	DPM045R001	

Subsystem: Rudder

04-Jul-98

Manufacturer list

Company	Country	Address	Phone	Fax	Hour rate, in \$
Aerodata	USA	New York	26351723	25119402	\$85.66
Aerofridge	USA	Minneapolis	56478592	55246271	\$80.38
Aerosewage	USA	Pittsburg	86278941	85046620	\$95.63
Aerowater	USA	Missoula	32947463	31715142	\$94.28
Air instrument	Israel	Natania	87546567	86314246	\$48.70
Air Transport	England	Dover	59876535	58644214	\$48.24
Aircondition	USA	Houston	47868394	46636073	\$78.63
Assembly	Israel	Ashdod	36475652	32523153	\$62.45
Avia Computer	France	Rue Luis 235, Lion	48859603	47627282	\$51.22
Bearing Computer	Canada	Vinnipeg	18748592	17516271	\$56.37
Bend Scope	Canada	Toronto	64635271	26364845	\$86.49
Bundles	England	Manchester	32535527	33774859	\$59.71
Channel	Canada	Kingston	37252527	36020206	\$60.92
Collins	USA	Chicago	48362547	47130226	\$98.06
Compo Interior	Sweden	Getburg	56372882	55140561	\$74.96
Composite	USA	Las Vegas	34563527	34847596	\$94.64
Compotext	USA	Miami	94784637	93552316	\$91.07
Concord	Italy	Milano	54356352	53543421	\$58.42
Conditioner	Sweden	Getburg	64534256	67487899	\$78.03
Contact	Sweden	Stockholm	48763893	47531572	\$86.47
Control Appliance	Germany	Bremen	48757598	47525277	\$90.69
Control Mechanism	Spain	Malaga	89585769	88353448	\$36.83
Crank & Rod	Italy	Turino	57857749	56625428	\$49.67
Crissair	USA	Los Angeles	68953748	67721427	\$95.27
Data computer	USA	Portland	63568956	62336635	\$98.57
Data instrument	England	Hastings	76464759	75232438	\$56.29
Digitime	Germany	Franfurt	74758869	73526548	\$70.86
Dowry Rotol	France	Rue Monterey 45, Bordeaux	23142537	21910216	\$50.66
Drainage	Germany	Hannover	74564554	73332233	\$75.47
Elcon	Germany	Leipzig	65564859	64332538	\$83.51
Electrolimit	USA	Hudson	46665788	45433467	\$86.97
Electrocables	Italy	Napoly	47745983	46513662	\$53.82
Electrocompact	Italy	Milan	66475698	65243377	\$55.26
Electrocontrol	England	Hull	76456475	75224154	\$57.26
Electrogoods	Canada	Montreal	32563521	37464758	\$0.00
Electrolimit	Canada	Calgary	87476756	86244435	\$70.24
Electromovement	USA	San Francisco	85675869	84443548	\$83.27
Electron	Sweden	Malmö	57586896	56354575	\$91.25
Electropower	Canada	Hamilton	52132768	50900447	\$66.25
Fasten	England	Manchester	37648598	36416277	\$52.32
Ferrulex	England	Bristol	21432648	20200327	\$55.32
Fibronix	France	Rue Marie 13, Magino	97353759	96121438	\$45.95
Fireman	Canada	Rue Monterey 24, Montreal	78594822	77362501	\$57.14
Fisher	USA	Kansas City	50968706	49736385	\$97.36
Fitend	Italy	Verona	64754856	63522535	\$51.94
FittingLand	Spain	Toledo	73920439	72688118	\$38.57
Flarefit	USA	New Orleans	39272123	38039802	\$99.67
Flexopipes	Spain	Toledo	76365245	83651683	\$94.56
Fuel Computer	England	Belfast	75932322	74700001	\$54.11
Fuel products	USA	Lincoln	47859032	46626711	\$94.96
Garrett	USA	Stockton	43674850	42442529	\$91.17
General Electric	USA	Newport	53754825	52522504	\$96.08
Generation	USA	Buffalo	67483902	66251581	\$80.63
Glare	Germany	Potsdam	43647859	42415538	\$85.37

MRD code report

A	B	C	D	E	F	Code
A	000	A	B			Airstructure, Dwg cascade, Assembly, Bottom, ,
A	000	A	L			Airstructure, Dwg cascade, Assembly, Left, ,
A	000	A	R			Airstructure, Dwg cascade, Assembly, Right, ,
A	000	A	T			Airstructure, Dwg cascade, Assembly, Top, ,
A	000	B	0	00		Airstructure, Dwg cascade, Beam, Beam number, Panel,
A	000	B	00	B		Airstructure, Dwg cascade, Beam, Beam number, Bottom,
A	000	B	00	L		Airstructure, Dwg cascade, Beam, Beam number, Left,
A	000	B	00	R		Airstructure, Dwg cascade, Beam, Beam number, Right,
A	000	B	00	T		Airstructure, Dwg cascade, Beam, Beam number, Top,
A	000	B	A	B		Airstructure, Dwg cascade, Beam, Assembly, Bottom,
A	000	B	A	L		Airstructure, Dwg cascade, Beam, Assembly, Left,
A	000	B	A	R		Airstructure, Dwg cascade, Beam, Assembly, Right,
A	000	B	A	T		Airstructure, Dwg cascade, Beam, Assembly, Top,
A	000	B	F	A	B	Airstructure, Dwg cascade, Beam, Forward, Assembly, Bottom
A	000	B	F	A	L	Airstructure, Dwg cascade, Beam, Forward, Assembly, Left
A	000	B	F	A	R	Airstructure, Dwg cascade, Beam, Forward, Assembly, Right
A	000	B	F	A	T	Airstructure, Dwg cascade, Beam, Forward, Assembly, Top
A	000	B	F	B		Airstructure, Dwg cascade, Beam, Forward, Bottom,
A	000	B	F	L		Airstructure, Dwg cascade, Beam, Forward, Left,
A	000	B	F	R		Airstructure, Dwg cascade, Beam, Forward, Right,
A	000	B	F	T		Airstructure, Dwg cascade, Beam, Forward, Top,
A	000	B	R	A	B	Airstructure, Dwg cascade, Beam, Rear, Assembly, Bottom
A	000	B	R	A	L	Airstructure, Dwg cascade, Beam, Rear, Assembly, Left
A	000	B	R	A	R	Airstructure, Dwg cascade, Beam, Rear, Assembly, Right
A	000	B	R	A	T	Airstructure, Dwg cascade, Beam, Rear, Assembly, Top
A	000	B	R	B		Airstructure, Dwg cascade, Beam, Rear, Bottom,
A	000	B	R	L		Airstructure, Dwg cascade, Beam, Rear, Left,
A	000	B	R	R		Airstructure, Dwg cascade, Beam, Rear, Right,
A	000	B	R	T		Airstructure, Dwg cascade, Beam, Rear, Top,
A	000	D	00	B		Airstructure, Dwg cascade, Door, Door number, Bottom,
A	000	D	00	L		Airstructure, Dwg cascade, Door, Door number, Left,
A	000	D	00	R		Airstructure, Dwg cascade, Door, Door number, Right,
A	000	D	00	T		Airstructure, Dwg cascade, Door, Door number, Top,
A	000	D	A	B		Airstructure, Dwg cascade, Door, Assembly, Bottom,
A	000	D	A	L		Airstructure, Dwg cascade, Door, Assembly, Left,
A	000	D	A	R		Airstructure, Dwg cascade, Door, Assembly, Right,
A	000	D	A	T		Airstructure, Dwg cascade, Door, Assembly, Top,
A	000	F	0	00		Airstructure, Dwg cascade, Floor, Floor number, Panel,
A	000	F	0	A	B	Airstructure, Dwg cascade, Floor, Floor number, Assembly, Bottom
A	000	F	0	A	L	Airstructure, Dwg cascade, Floor, Floor number, Assembly, Left
A	000	F	0	A	R	Airstructure, Dwg cascade, Floor, Floor number, Assembly, Right
A	000	F	0	A	T	Airstructure, Dwg cascade, Floor, Floor number, Assembly, Top
A	000	F	0	B		Airstructure, Dwg cascade, Floor, Floor number, Bottom,
A	000	F	0	L		Airstructure, Dwg cascade, Floor, Floor number, Left,
A	000	F	0	R		Airstructure, Dwg cascade, Floor, Floor number, Right,
A	000	F	0	T		Airstructure, Dwg cascade, Floor, Floor number, Top,
A	000	H	00	B		Airstructure, Dwg cascade, Hinge, Hinge number, Bottom,
A	000	H	00	L		Airstructure, Dwg cascade, Hinge, Hinge number, Left,
A	000	H	00	R		Airstructure, Dwg cascade, Hinge, Hinge number, Right,
A	000	H	00	T		Airstructure, Dwg cascade, Hinge, Hinge number, Top,
A	000	L	0	A	B	Airstructure, Dwg cascade, Longerons, Longerons number, Assembly, Bottom
A	000	L	0	A	L	Airstructure, Dwg cascade, Longerons, Longerons number, Assembly, Left
A	000	L	0	A	R	Airstructure, Dwg cascade, Longerons, Longerons number, Assembly, Right
A	000	L	0	A	T	Airstructure, Dwg cascade, Longerons, Longerons number, Assembly, Top

Last revision: C **Date:** 25-Apr-98

Report Name: Fatigue substantiation

RecNumber: DPM046R001

Women Critical parts report

Rep Number:	DPM046R001	Report Name:	Fatigue substantiation	Notes
MRD Critical parts report				
MRD	Dwg Number	Part Number	Part Name	
			Len	
			Width	
			gth	
			inch	
			Helg	
			Dia	
			Thick	
			Material	
			Welig	
			ht, in	
			lb	
			InstPart	
			Number	
			BL	
			CG,	
			Inch	
			STA	
			WL	
			CG,	
			Inch	
			Drawing	
			Number	
			Map	
			System	
			Report	

System: Structure	Subsystem: Fuselage	Subsystem: Air cabin	Subsystem: Fwd cabin
A224BFL DPM2241510 DPM2241510-001	MLG brace fitting, LH	3.80 48.0010.00 0.00 4.000 AL7050-T7 17.16	DPM2200000-50111.1 518.9 21.7 DPM2200001 DPM042R001
A224BFR DPM2241510 DPM2241510-002	MLG brace fitting, RH	3.80 49.0010.00 0.00 4.000 AL7050-T7 17.18	DPM2200000-50111.1 518.9 21.7 DPM2200001 DPM042R001
A224BFR DPM2241510 DPM2241510-002	MLG brace fitting, RH	3.80 49.0010.00 0.00 4.000 AL7050-T7 17.18	DPM2200000-50111.1 518.9 21.7 DPM2200001 DPM042R001
AFR27A DPM2240010 DPM2240010-501	Frame 27 easy	79.00 104.00 4.25 0.00	13.51 DPM2200000-501 0.0 495.0 52.0 DPM2200001 DPM042R001
AFR27L DPM2240011 DPM2240011-001	Frame 27 LH	34.80 83.20 4.25 0.00 4.250 AL7050-T7 5.74	DPM2240010-50149.0 485.0 62.1 DPM2200001 DPM042R001
AFR27R DPM2240012 DPM2240012-001	Frame 27 RH	34.80 83.20 4.25 0.00 4.250 AL7050-T7 5.74	DPM2240010-50149.0 485.0 62.1 DPM2200001 DPM042R001
AFR27R DPM2240012 DPM2240012-001	Frame 27 RH	34.80 83.20 4.25 0.00 4.250 AL7050-T7 5.74	DPM2240010-50149.0 485.0 62.1 DPM2200001 DPM042R001
AFR27T DPM2240014 DPM2240014-001	Frame 27 upper	7.37 44.00 4.25 0.00 4.250 AL7050-T7 2.04	DPM2240010-501 0.0 485.0 102.4 DPM2200001 DPM042R001
Subsystems: Centre-wing box			
A223L3L DPM2231401 DPM2231401-001	Lower longeron, LH, (wing beam 0)	22.30 101.00 2.75 0.00 2.750 AL7050-T7 33.69	DPM2231400-50140.0 459.5 8.8 DPM2200001 DPM042R001
A223L3R DPM2231402 DPM2231402-002	Lower longeron, RH, (wing beam 0)	22.30 101.00 2.75 0.00 2.750 AL7050-T7 33.69	DPM2231400-50240.0 459.5 8.8 DPM2200001 DPM042R001
A223B8 DPM2232301 DPM2232301-001	Lower skin	80.70 101.00 2.75 0.00 2.750 AL7050-T7 97.81	DPM2232300-501 0.0 459.5 1.2 DPM2200001 DPM042R001
AFR20B DPM2230011 DPM2230011-001	Frame 20 lower, (centre-wing box structure)	25.00 80.00 3.25 0.00 3.250 AL7050-T7 28.83	DPM2230010-501 0.0 409.0 8.9 DPM2200001 DPM042R001
AFR27B DPM2230081 DPM2230081-001	Frame 27 lower, (centre-wing box structure)	25.00 80.00 3.25 0.00 3.250 AL7050-T7 28.83	DPM2230080-501 0.0 510.0 8.8 DPM2200001 DPM042R001
Subsystems: Fwd cabin			
AFR12L DPM2210041 DPM2210041-001	Frame 12 LH	46.68 97.10 0.88 0.00 4.250 AL7050-T7 5.97	DPM2210040-50149.0 310.0 44.9 DPM2200001 DPM042R001
AFR15L DPM2210071 DPM2210071-001	Frame 15 LH	46.68 97.10 4.25 0.00 4.250 AL7050-T7 6.97	DPM2210070-50149.0 340.0 44.9 DPM2200001 DPM042R001
Subsystems: Nose			
A212BFL DPM2121320 DPM2121320-001	NLG brace fitting, LH	3.10 33.75 8.00 0.00 0.080 AL7050-T7 13.09	DPM2100000-50111.5 172.9 22.3 DPM2100001 DPM041R001

Design criteria

MRD	Dwg Number	Part Number	Part Name	Weight BLCG	STACG WLCG	Inst part number	Map dwg number	Map sys report	Item	Design Criteria
System: Flight test										
Subsystem: Structure										
Subsystems: Nose										
Report Number:	DPM066R002		Flight test units in all requirements	61.32	0	160	33 DPM0662110-501	DPM066R001		Item ZFTR001 to be jig located
ZFTR001	DPM0662111	DPM0662111-501	Flight test radome	61.32	0	160	33 DPM0662110-501	DPM066R002	1	
ZFTR001	DPM0662111	DPM0662111-501	Flight test radome	61.32	0	160	33 DPM0662110-501	DPM066R001	2	Item ZFTR001 holes to be drilled by proper equipment
ZFTR001	DPM0662111	DPM0662111-501	Flight test radome	61.32	0	160	33 DPM0662110-501	DPM066R001	3	Ply orientation and surface smoothness
System: Structure										
Subsystem: Wing										
Subsystems: Torsion box										
Report Number:	DPM120R001		Wing torsion box design consideration	7.53	49	522.2	10.2 DPM1200010-502	DPM1100001		Spar 2 extension, RH to be jig located
A120B02X	DPM1200060	DPM1200060-012	Spar 2 extension, RH	7.53	49	522.2	10.2 DPM1200010-502	DPM1100001	1	
A120B02X	DPM1200060	DPM1200060-012	Spar 2 extension, RH	7.53	49	522.2	10.2 DPM1200010-502	DPM1100001	2	Spar 2 extension, RH holes to be drilled by proper equipment
A120B02X	DPM1200060	DPM1200060-012	Spar 2 extension, RH	7.53	49	522.2	10.2 DPM1200010-502	DPM1100001	3	Longitudinal Grain Direction
A120B31L	DPM1200031	DPM1200031-001	Rear auxiliary spar, LH	30.47	99	502.5	6.9 DPM1200030-501	DPM1100001	1	Rear auxiliary spar, LH to be jig located
A120B31L	DPM1200031	DPM1200031-001	Rear auxiliary spar, LH	30.47	99	502.5	6.9 DPM1200030-501	DPM1100001	2	Rear auxiliary spar, LH holes to be drilled by proper equipment
A120B31L	DPM1200031	DPM1200031-001	Rear auxiliary spar, LH	30.47	99	502.5	6.9 DPM1200030-501	DPM1100001	3	Longitudinal Grain Direction
A120B31R	DPM1200031	DPM1200031-002	Rear auxiliary spar, RH	30.47	-99	502.5	6.9 DPM1200030-502	DPM1100001	1	Rear auxiliary spar, RH to be jig located
A120B31R	DPM1200031	DPM1200031-002	Rear auxiliary spar, RH	30.47	-99	502.5	6.9 DPM1200030-502	DPM1100001	2	Rear auxiliary spar, RH holes to be drilled by proper equipment
A120B31R	DPM1200031	DPM1200031-002	Rear auxiliary spar, RH	30.47	-99	502.5	6.9 DPM1200030-502	DPM1100001	3	Longitudinal Grain Direction
A120B41L	DPM1200041	DPM1200041-001	MLG aft spar, LH	15.86	59	534.5	9.3 DPM1200040-501	DPM1100001	1	MLG aft spar, LH to be jig located
A120B41L	DPM1200041	DPM1200041-001	MLG aft spar, LH	15.86	59	534.5	9.3 DPM1200040-501	DPM1100001	2	MLG aft spar, LH holes to be drilled by proper equipment

Report Name: Production cost Design-to-Cost evaluation

Rep Number: DPM080R003

Cost In \$

Cost

Cost

Cost

Cost

Cost

Cost

Cost

Cost

Cost

Cost

MRD parts Design-to-Cost report

MRD	Dwg Number	Part Number	Part Name	Width Inch	Len Inch	Hgt Inch	Dia Inch	Thk Inch	Mat Inch	Wgt lb	Inst lb	BL CG	STA CG	WL CG	Run Inch	Time Inch	Cost In \$
A120B41L	DPM1200041	DPM1200041-001	MLG aft spar, LH	21.30	36.00	3.25	0.00	3.25	AL7050-T7	15.88	DPM1200040-501	59.0	534.5	9.3	1.39	Mill Vision 50.14	39.52 3
A120B41R	DPM1200041	DPM1200041-002	MLG aft spar, RH	21.30	36.00	3.25	0.00	3.25	AL7050-T7	15.88	DPM1200040-502	-59.0	534.5	9.3	1.39	Mill Comp 55.68	21.98 1
A120B41R	DPM1200041	DPM1200041-002	MLG aft spar, RH	21.30	36.00	3.25	0.00	3.25	AL7050-T7	15.88	DPM1200040-502	-59.0	534.5	9.3	1.39	Mill Vision 50.14	39.52 3
A120B01L	DPM1200050	DPM1200050-001	Spar 1, LH	3.25	81.50	4.50	0.00	3.25	AL7075-T7	20.55	DPM1200010-501	68.0	531.5	9.8	1.39	Mill Comp 55.68	21.98 1
A120B01L	DPM1200050	DPM1200050-001	Spar 1, LH	3.25	81.50	4.50	0.00	3.25	AL7075-T7	20.55	DPM1200010-501	68.0	531.5	9.8	1.39	Mill Vision 50.14	39.52 3
A120B01R	DPM1200050	DPM1200050-002	Spar 1, RH	3.25	81.50	4.50	0.00	3.25	AL7075-T7	20.55	DPM1200010-502	-68.0	531.5	9.8	1.39	Mill Comp 55.68	21.98 1
A120B01R	DPM1200050	DPM1200050-002	Spar 1, RH	3.25	81.50	4.50	0.00	3.25	AL7075-T7	20.55	DPM1200010-502	-68.0	531.5	9.8	1.39	Mill Vision 50.14	39.52 3
A120B02L	DPM1200060	DPM1200060-001	Spar 2, LH	3.25	77.10	4.00	0.00	3.25	AL7075-T7	18.97	DPM1200010-501	78.0	534.4	10.2	1.39	Mill Comp 55.68	21.98 1
A120B02L	DPM1200060	DPM1200060-001	Spar 2, LH	3.25	77.10	4.00	0.00	3.25	AL7075-T7	18.97	DPM1200010-502	-78.0	534.4	10.2	1.39	Mill Vision 50.14	39.52 3
A120B02R	DPM1200060	DPM1200060-002	Spar 2, RH	3.25	77.10	4.00	0.00	3.25	AL7075-T7	18.97	DPM1200010-502	-78.0	534.4	10.2	1.39	Mill Comp 55.68	21.98 1
A120B02R	DPM1200060	DPM1200060-002	Spar 2, RH	3.25	77.10	4.00	0.00	3.25	AL7075-T7	18.97	DPM1200010-501	48.0	522.2	10.2	1.39	Mill Vision 50.14	39.52 3
A120B02E	DPM1200060	DPM1200060-011	Spar 2 extension, LH	3.25	35.50	7.10	0.00	3.25	AL7050-T7	7.53	DPM1200010-501	48.0	522.2	10.2	1.39	Mill Comp 55.68	21.98 1
A120B02E	DPM1200060	DPM1200060-011	Spar 2 extension, LH	3.25	35.50	7.10	0.00	3.25	AL7050-T7	7.53	DPM1200010-502	-48.0	522.2	10.2	1.39	Mill Vision 50.14	39.52 3
A120B02X	DPM1200060	DPM1200060-012	Spar 2 extension, RH	3.25	35.50	7.10	0.00	3.25	AL7050-T7	7.53	DPM1200010-502	-48.0	522.2	10.2	1.39	Mill Comp 55.68	21.98 1
A120B02X	DPM1200060	DPM1200060-012	Spar 2 extension, RH	3.25	35.50	7.10	0.00	3.25	AL7050-T7	7.53	DPM1200010-501	94.0	537.3	10.9	1.39	Mill Vision 50.14	39.52 3
A120B03L	DPM1200070	DPM1200070-001	Spar 3, LH	3.25	72.80	3.50	0.00	3.25	AL7075-T7	3.25	DPM1200010-501	94.0	537.3	10.9	1.39	Mill Comp 55.68	21.98 1
A120B03L	DPM1200070	DPM1200070-001	Spar 3, LH	3.25	72.80	3.50	0.00	3.25	AL7075-T7	3.25	DPM1200010-502	-94.0	537.3	10.9	1.39	Mill Vision 50.14	39.52 3
A120B03R	DPM1200070	DPM1200070-002	Spar 3, RH	3.25	72.80	3.50	0.00	3.25	AL7075-T7	3.25	DPM1200010-502	-94.0	537.3	10.9	1.39	Mill Comp 55.68	21.98 1
A120B03R	DPM1200070	DPM1200070-002	Spar 3, RH	3.25	72.80	3.50	0.00	3.25	AL7075-T7	3.25	DPM1200010-501	112.0	540.2	11.5	1.39	Mill Vision 50.14	39.52 3
A120B04L	DPM1200080	DPM1200080-001	Spar 4, LH	3.25	68.20	3.00	0.00	3.25	AL7075-T7	15.98	DPM1200010-501	112.0	540.2	11.5	1.39	Mill Comp 55.68	21.98 1
A120B04L	DPM1200080	DPM1200080-001	Spar 4, LH	3.25	68.20	3.00	0.00	3.25	AL7075-T7	15.98	DPM1200010-502	-112.0	540.2	11.5	1.39	Mill Vision 50.14	39.52 3
A120B04R	DPM1200080	DPM1200080-002	Spar 4, RH	3.25	68.20	3.00	0.00	3.25	AL7075-T7	15.98	DPM1200010-502	-112.0	540.2	11.5	1.39	Mill Comp 55.68	21.98 1
A120B04R	DPM1200080	DPM1200080-002	Spar 4, RH	3.25	68.20	3.00	0.00	3.25	AL7075-T7	15.98	DPM1200010-501	130.0	543.1	12.2	1.39	Mill Vision 50.14	39.52 3
A120B05L	DPM1200090	DPM1200090-001	Spar 5, LH	3.25	63.20	2.50	0.00	3.25	AL7075-T7	14.41	DPM1200010-501	130.0	543.1	12.2	1.39	Mill Comp 55.68	21.98 1
A120B05L	DPM1200090	DPM1200090-001	Spar 5, LH	3.25	63.20	2.50	0.00	3.25	AL7075-T7	14.41	DPM1200010-502	-130.0	543.1	12.2	1.39	Mill Vision 50.14	39.52 3
A120B05R	DPM1200090	DPM1200090-002	Spar 5, RH	3.25	63.20	2.50	0.00	3.25	AL7075-T7	14.41	DPM1200010-502	-130.0	543.1	12.2	1.39	Mill Comp 55.68	21.98 1
A120B05R	DPM1200090	DPM1200090-002	Spar 5, RH	3.25	63.20	2.50	0.00	3.25	AL7075-T7	14.41	DPM1200010-501	148.0	546.0	12.8	1.39	Mill Vision 50.14	39.52 3
A120B06L	DPM1200100	DPM1200100-001	Spar 6, LH	3.25	59.80	2.00	0.00	3.25	AL7075-T7	13.28	DPM1200010-501	148.0	546.0	12.8	1.39	Mill Comp 55.68	21.98 1
A120B06L	DPM1200100	DPM1200100-001	Spar 6, LH	3.25	59.80	2.00	0.00	3.25	AL7075-T7	13.28	DPM1200010-502	-148.0	546.0	12.8	1.39	Mill Vision 50.14	39.52 3
A120B06R	DPM1200100	DPM1200100-002	Spar 6, RH	3.25	59.80	2.00	0.00	3.25	AL7075-T7	13.28	DPM1200010-502	-148.0	546.0	12.8	1.39	Mill Comp 55.68	21.98 1
A120B06R	DPM1200100	DPM1200100-002	Spar 6, RH	3.25	59.80	2.00	0.00	3.25	AL7075-T7	13.28	DPM1200010-501	148.0	546.0	12.8	1.39	Mill Vision 50.14	39.52 3

Last revision: C Date: 13-Jul-98

Rep Number: DPM080R004 Report Name: Production cost DFMA evaluation

MRD DFMA analysis report

MRD	Dwg Number	Part Number	Part Name	Width	Len	Hdg	Dia	Thick	Material	Wgt	Inst	Part	Number	BL	STA	WL	Labor	Tool	Addit	Item	Man	To	BT
				Inch	gth	Inch	ht	met	nece,	ht	In			CG	Inch	CG	CG	cost	In	In	cost	at	
A234F1ARDPM2342310	DPM2342310-502	Pylon fwd fairing assy, RH	18.80	25.00	8.40	0.00	0.100	AL2024-T3	6.95	DPM2340000-502	52.8	608.5	78.515.01	120.50	\$8.73	11.93	\$84.00	1					
A234F1L	DPM2342311-001	Pylon fwd fairing skin, LH	18.80	25.00	0.10	0.00	0.100	AL2024-T3	5.95	DPM2342310-501	52.8	608.5	78.521.40	128.23	\$8.10	12.43	\$37.89	3					
A234F1L	DPM2342311-001	Pylon fwd fairing skin, LH	18.80	25.00	0.10	0.00	0.100	AL2024-T3	5.95	DPM2342310-501	52.8	608.5	78.521.40	128.23	\$8.10	12.43	\$37.89	3					
A234F1R	DPM2342311-002	Pylon fwd fairing skin, RH	18.80	25.00	0.10	0.00	0.100	AL2024-T3	5.95	DPM2342310-502	52.8	608.5	78.518.10	112.43	\$8.86	12.10	\$17.50	1					
A234F1R	DPM2342311-002	Pylon fwd fairing skin, RH	18.80	25.00	0.10	0.00	0.100	AL2024-T3	5.95	DPM2342310-502	52.8	608.5	78.518.10	112.43	\$8.86	12.10	\$17.50	1					
A234F1L1	DPM2342321-025	Leading edge inspection	4.00	25.00	0.06	0.00	0.063	AL2024-T3	0.66	DPM2342310-501	60.0	608.5	78.521.03	128.73	\$21.03	28.73	\$63.50	3					
A234F1L1	DPM2342321-025	Leading edge inspection	4.00	25.00	0.06	0.00	0.063	AL2024-T3	0.66	DPM2342310-501	60.0	608.5	78.521.03	128.73	\$21.03	28.73	\$63.50	3					
A234F1R1	DPM2342321-026	Leading edge inspection	4.00	25.00	0.06	0.00	0.063	AL2024-T3	0.66	DPM2342310-502	60.0	608.5	78.516.11	122.01	\$19.07	26.04	\$63.00	3					
A234F1R1	DPM2342321-026	Leading edge inspection	4.00	25.00	0.06	0.00	0.063	AL2024-T3	0.66	DPM2342310-502	60.0	608.5	78.516.11	122.01	\$19.07	26.04	\$63.00	3					
A234F2AL	DPM2342410-501	Pylon aft fairing assy, LH	18.80	82.00	8.40	0.00	0.100	AL2024-T3	18.48	DPM2340000-501	52.8	703.0	78.520.66	128.22	\$13.41	18.31	\$34.50	1					
A234F2AL	DPM2342410-501	Pylon aft fairing assy, LH	18.80	82.00	8.40	0.00	0.100	AL2024-T3	18.48	DPM2340000-501	52.8	703.0	78.520.66	128.22	\$13.41	18.31	\$34.50	1					
A234F2AL	DPM2342410-502	Pylon aft fairing assy, RH	18.80	82.00	8.40	0.00	0.100	AL2024-T3	18.48	DPM2340000-502	52.8	703.0	78.511.69	115.96	\$16.97	23.18	\$69.50	3					
A234F2AL	DPM2342410-502	Pylon aft fairing assy, RH	18.80	82.00	8.40	0.00	0.100	AL2024-T3	18.48	DPM2340000-502	52.8	703.0	78.511.69	115.96	\$16.97	23.18	\$69.50	3					
A234F2L1	DPM2342411-001	Pylon aft fairing skin, LH	18.80	82.00	0.10	0.00	0.100	AL2024-T3	18.48	DPM2342410-501	52.8	703.0	78.518.33	125.03	\$8.24	11.26	\$76.40	3					
A234F2L1	DPM2342411-001	Pylon aft fairing skin, LH	18.80	82.00	0.10	0.00	0.100	AL2024-T3	18.48	DPM2342410-501	52.8	703.0	78.518.33	125.03	\$8.24	11.26	\$76.40	3					
A234F2L1	DPM2342411-002	Pylon aft fairing skin, RH	18.80	82.00	0.10	0.00	0.100	AL2024-T3	18.48	DPM2342410-502	52.8	703.0	78.518.33	125.03	\$8.24	11.26	\$76.40	3					
A234F2L1	DPM2342411-002	Pylon aft fairing skin, RH	18.80	82.00	0.10	0.00	0.100	AL2024-T3	18.48	DPM2342410-502	52.8	703.0	78.518.33	125.03	\$8.24	11.26	\$76.40	3					
A234F2L1	DPM2342411-011	Trailing edge inspection	8.00	38.00	0.06	0.00	0.063	AL2024-T3	1.92	DPM2342410-501	74.0	709.0	78.515.50	121.17	\$17.10	23.35	\$243.46	1					
A234F2L1	DPM2342411-011	Trailing edge inspection	8.00	38.00	0.06	0.00	0.063	AL2024-T3	1.92	DPM2342410-501	74.0	709.0	78.515.50	121.17	\$17.10	23.35	\$243.46	1					
A234F2L1	DPM2342411-012	Trailing edge inspection	8.00	38.00	0.06	0.00	0.063	AL2024-T3	1.92	DPM2342410-502	74.0	709.0	78.515.50	121.17	\$17.10	23.35	\$243.46	1					
A234F2L1	DPM2342411-012	Trailing edge inspection	8.00	38.00	0.06	0.00	0.063	AL2024-T3	1.92	DPM2342410-502	74.0	709.0	78.515.50	121.17	\$17.10	23.35	\$243.46	1					
A234F2L2	DPM2342421-019	Nacelle pylon services	5.00	6.00	0.06	0.00	0.063	AL2024-T3	0.19	DPM2342410-501	53.0	661.0	72.819.07	128.04	\$18.08	24.70	\$76.44	1					
A234F2L2	DPM2342421-019	Nacelle pylon services	5.00	6.00	0.06	0.00	0.063	AL2024-T3	0.19	DPM2342410-501	53.0	661.0	72.819.07	128.04	\$18.08	24.70	\$76.44	1					
A234F2L2	DPM2342421-020	Nacelle pylon services	5.00	6.00	0.06	0.00	0.063	AL2024-T3	0.19	DPM2342410-502	53.0	661.0	72.811.93	116.30	\$18.70	25.54	\$60.00	3					
A234F2L2	DPM2342421-020	Nacelle pylon services	5.00	6.00	0.06	0.00	0.063	AL2024-T3	0.19	DPM2342410-502	53.0	661.0	72.811.93	116.30	\$18.70	25.54	\$60.00	3					
A234F2L3	DPM2342421-022	Pylon structural inspection	3.00	5.00	0.06	0.00	0.063	AL2024-T3	0.10	DPM2342410-501	48.0	714.5	72.821.40	129.23	\$17.96	24.53	\$16.76	1					
A234F2L3	DPM2342421-022	Pylon structural inspection	3.00	5.00	0.06	0.00	0.063	AL2024-T3	0.10	DPM2342410-501	48.0	714.5	72.821.40	129.23	\$17.96	24.53	\$16.76	1					
A234F2R3	DPM2342421-024	Pylon structural inspection	3.00	5.00	0.06	0.00	0.063	AL2024-T3	0.10	DPM2342410-502	48.0	714.5	72.816.11	122.01	\$8.77	\$9.24	\$28.53	1					
A234F2R3	DPM2342421-024	Pylon structural inspection	3.00	5.00	0.06	0.00	0.063	AL2024-T3	0.10	DPM2342410-502	48.0	714.5	72.816.11	122.01	\$8.77	\$9.24	\$28.53	1					
A234F2R3	DPM2342421-024	Pylon structural inspection	3.00	5.00	0.06	0.00	0.063	AL2024-T3	0.10	DPM2342410-502	48.0	714.5	72.816.11	122.01	\$8.77	\$9.24	\$28.53	1					
A234M1L	DPM2345011-001	Power plant fwd mount	10.70	12.30	5.40	0.00	1.750	Steel	9.48	DPM2340000-501	62.5	626.0	76.018.33	125.03	\$17.96	24.53	\$198.57	3					
A234M1L	DPM2345011-001	Power plant fwd mount	10.70	12.30	5.40	0.00	1.750	Steel	9.48	DPM2340000-501	62.5	626.0	76.018.33	125.03	\$17.96	24.53	\$198.57	3					

RepNumber: DPM047R001

Report Name: Loads substantiation

Last revision: A Date: 23-Jul-98

MRD Dynamic Loads report

MRD	Dwg Number	Part Number	Part Name	Width Inch	Len Inch	Hdg Inch	Dia Thick Inch	Material	Weld ht, in	InstPartNumber	BL CG, Inch	STA CG, Inch	WL CG, Inch	Map Drawing Number	Map System ude, Report Inch	Amplitt ratio n, in g
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System: Aircraft

Subsystem: Structure

Subsystems:																
A100A	DPM1000000	DPM1000000-501	Aircraft assy	0.00	0.00	0.00	0.00	0.00	135.67	DPM1000000-501	0.0	545.7	39.8	DPM10100001	DPM040R0010.019	2.8g

Subsystem: Systems

Subsystems:																
A102A	DPM1020000	DPM1020000-501	Aircraft structure assy	792.00	821.00	0.00	0.00	0.00	958.24	DPM1000000-501	0.0	545.7	39.8	DPM10200001	DPM040R0010.025	1.9g

System: APU

Subsystem: Compressor

Subsystems:																
E201X01	DPM5400010	DPM5400010-047	Inlet fitting, APU	0.00	0.00	0.00	0.00	0.00	0.10	DPM5400010-501	-1.1	629.2	30.7	DPM54000001	DPM540R0010.026	1.2g
E201Y01	DPM5451112	W801B84	Fitting	0.00	0.00	0.00	0.00	0.00	0.13	DPM5451112-501	-1.1	629.2	30.7	DPM54000001	DPM540R0010.025	4.4g

Subsystems: Bleed air

E201X02	DPM5400010	DPM5400010-052	Bleed air fitting, APU	0.00	0.00	0.00	0.00	0.00	0.09	DPM5400010-501	-1.1	629.2	30.7	DPM54000001	DPM540R0010.025	1.2g
E201Y02	DPM6621114	W801B40	Fitting	0.00	0.00	0.00	0.00	0.00	0.08	DPM6621114-501	-1.1	629.2	30.7	DPM54000001	DPM540R0010.024	4.5g

Subsystems: Drain

E201X08	DPM5400010	AN815D08	Union flare fitting 3/8"	0.00	0.00	0.00	0.38	0.00	0.02	DPM5400010-501	-1.1	629.2	30.7	DPM54000001	DPM540R0010.019	3.1g
E201Y08	DPM5481112	AN818D08	Nut - coupling 3/8"	0.00	0.00	0.00	0.00	0.00	0.02	DPM5481112-501	-1.1	629.2	30.7	DPM54000001	DPM540R0010.021	2.7g

Subsystem: ECS

Subsystems: Compressor																
E201X12	DPM5400010	DPM5400010-023	Shaft, APU compressor	0.00	0.00	0.00	0.00	0.00	0.15	DPM5400010-501	-1.1	629.2	30.7	DPM54000001	DPM540R0010.028	0.7g

Subsystem: Electrical

Subsystems: Starter/generator																
E201X11	DPM5400010	DPM5400010-015	Shaft, APU starter/genera	0.00	0.00	0.00	0.00	0.00	0.15	DPM5400010-501	-1.1	629.2	30.7	DPM54000001	DPM540R0010.028	0.7g

Subsystem: Fire protection

Subsystems: Fire extinguishing																
E201X10	DPM5400010	AN815D12	Union flare fitting 3/4"	0.00	0.00	0.00	0.75	0.00	0.03	DPM5400010-501	-1.1	629.2	30.7	DPM55000001	DPM550R0010.029	4.8g
E201Y10	DPM5521011	AN818D12	Nut - coupling 3/4"	0.00	0.00	0.00	0.00	0.00	0.03	DPM5521011-501	-1.1	629.2	30.7	DPM55000001	DPM550R0010.031	4.5g

Last revision: B Update: 23-Nov-98

Report Name: Failure parts investigation

Failure items

Report Number: DPM081R004

Dwg Number Part Number MRD Weight BLCG STACG WLCG Inst Part Number Place Failure Description Treatment FDate TDate

System: Avionics

Subsystems: Audio

Subsystems: Entertainment

Subsystems: Filifone

Subsystems: Communication

Subsystems: Filifone

Subsystems: Filifone

Subsystems: Filifone

Subsystems: Filifone

Subsystems: Filifone

Subsystems: Filifone

Subsystems: Filifone

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Subsystems: Filifone

Subsystems: Filifone

Last revision: C Update: 25-Nov-98

PaperName: Flight test evaluation and substantiation

Report Number: DPM086R001

Flight test

Flight test									
MRD	Dwg Number	Part Name	Weight BLCG	STAGC WLOG	Inst part number	Map dwg number	Map sys report	Flight test description	Date
System: AFU									
Subsystem: Compressor									
Subsystems: Air Inlet									
E201X01	DPM5400010	DPM5400010-047 Inlet fitting, APU	0.10	-1.1	629.2	30.7	DPM5400010-501 DPM5400001	DPM540R001	Perform flight test of E201X01, 23- DPM5400010-047 as requested by flight Feb-99
E201Y01	DPM5451112	W801B64 Fitting	0.13	-1.1	629.2	30.7	DPM5451112-501 DPM5400001	DPM540R001	Perform flight test of E201Y01, 24- W801B64 as requested by flight test Feb-99
Subsystems: Bleed air									
E201X02	DPM5400010	DPM5400010-052 Bleed air fitting, APU	0.09	-1.1	629.2	30.7	DPM5400010-501 DPM5400001	DPM540R001	Perform flight test of E201X02, 23- DPM5400010-052 as requested by flight Feb-99
E201Y02	DPM6621114	W901B40 Fitting	0.08	-1.1	629.2	30.7	DPM6621114-501 DPM5400001	DPM540R001	Perform flight test of E201Y02, 24- W901B40 as requested by flight test Feb-99
Subsystems: Drain									
E201X06	DPM5400010	AN815D06 Union flare fitting 3/8"	0.02	-1.1	629.2	30.7	DPM5400010-501 DPM5400001	DPM540R001	Perform flight test of E201X06, 23- AN815D06 as requested by flight test Feb-99
E201Y06	DPM5481112	AN818D06 Nut - coupling 3/8"	0.02	-1.1	629.2	30.7	DPM5481112-501 DPM5400001	DPM540R001	Perform flight test of E201Y06, 24- AN818D06 as requested by flight test Feb-99
Subsystem: ECS									
Subsystems: Compressor									
E201X12	DPM5400010	DPM5400010-023 Shaft, APU compressor	0.15	-1.1	629.2	30.7	DPM5400010-501 DPM5400001	DPM540R001	Perform flight test of E201X12, 24- DPM5400010-023 as requested by flight Feb-99
Subsystem: Electrical									
Subsystems: Starter/generator									
E201X11	DPM5400010	DPM5400010-015 Shaft, APU starter/generator	0.15	-1.1	629.2	30.7	DPM5400010-501 DPM5400001	DPM540R001	Perform flight test of E201X11, 24- DPM5400010-015 as requested by flight Feb-99
Subsystem: Fire protection									
Subsystems: Fire extinguishing									
E201X10	DPM5400010	AN815D12 Union flare fitting 3/4"	0.03	-1.1	629.2	30.7	DPM5400010-501 DPM5600001	DPM560R001	Perform flight test of E201X10, 24- AN815D12 as requested by flight test Feb-99
E201Y10	DPM5621011	AN818D12 Nut - coupling 3/4"	0.03	-1.1	629.2	30.7	DPM5621011-501 DPM5600001	DPM560R001	Perform flight test of E201Y10, 24- AN818D12 as requested by flight test Feb-99
Subsystem: Fuel									
Subsystems: Drain									
E201X06	DPM5400010	AN815D06 Union flare fitting 3/8"	0.02	-1.1	629.2	30.7	DPM5400010-501 DPM5400001	DPM540R001	Perform flight test of E201X06, 23- AN815D06 as requested by flight test Feb-99

MRD function list by system/subsystems

MRD	Part Number	Part Name	BLCG	STACG	WLCG	InstPartNum	MRDA	Map	Dwg	Num	Map	Sys	Report
System	Aircraft	Subsystem	Structure										
		Subsystems											
A100A	DPM1000000-501	Aircraft assy	0.00	545.70	39.80	DPM100000C		DPM1010001	DPM040R001				
		Subsystem	Systems										
		Subsystems											
A102A	DPM1020000-501	Aircraft structure assy	0.00	545.70	39.80	DPM100000CA100A		DPM1020001	DPM040R001				
System	APU	Subsystem	Compressor										
		Subsystems	Air inlet										
E201X01	DPM5400010-047	Inlet fitting, APU	-1.09	629.21	30.72	DPM540001CE201		DPM5400001	DPM540R001				
E201Y01	W901B64	Fitting	-1.09	629.21	30.72	DPM5451112EAN02-6		DPM5400001	DPM540R001				
		Subsystems	Bleed air										
E201X02	DPM5400010-052	Bleed air fitting, APU	-1.09	629.21	30.72	DPM540001CE201		DPM5400001	DPM540R001				
E201Y02	W901B40	Fitting	-1.09	629.21	30.72	DPM6621114VBA03-4		DPM5400001	DPM540R001				
		Subsystems	Drain										
E201X06	AN815D06	Union flare fitting 3/8"	-1.09	629.21	30.72	DPM540001CE201		DPM5400001	DPM540R001				
E201Y06	AN818D06	Nut - coupling 3/8"	-1.09	629.21	30.72	DPM5481112EAD02-0		DPM5400001	DPM540R001				
		Subsystem	ECS										
		Subsystems	Compressor										
E201X12	DPM5400010-023	Shaft, APU compressor	-1.09	629.21	30.72	DPM540001CE201		DPM5400001	DPM540R001				
		Subsystem	Electrical										
		Subsystems	Starter/generator										
E201X11	DPM5400010-015	Shaft, APU starter/generat	-1.09	629.21	30.72	DPM540001CE201		DPM5400001	DPM540R001				
		Subsystem	Fire protection										
		Subsystems	Fire extinguishing										
E201X10	AN815D12	Union flare fitting 3/4"	-1.09	629.21	30.72	DPM540001CE201		DPM5500001	DPM550R001				
E201Y10	AN818D12	Nut - coupling 3/4"	-1.09	629.21	30.72	DPM5521011VFE11-1		DPM5500001	DPM550R001				
		Subsystem	Fuel										
		Subsystems	Drain										
E201X05	AN815D06	Union flare fitting 3/8"	-1.09	629.21	30.72	DPM540001CE201		DPM5400001	DPM540R001				
E201Y05	AN818D06	Nut - coupling 3/8"	-1.09	629.21	30.72	DPM5481111EAD01-0		DPM6200001	DPM620R001				
		Subsystems	Feed										
E201X04	W901B08	Ferrule	-1.09	629.21	30.72	DPM540001CE201		DPM5400001	DPM540R001				
E201Y04	W901B08	Ferrule	-1.09	629.21	30.72	DPM6211124FF024-0		DPM6200001	DPM620R001				
		Subsystem	Gearbox										
		Subsystems	Drain										
E201X09	AN815D06	Union flare fitting 3/8"	-1.09	629.21	30.72	DPM540001CE201		DPM5400001	DPM540R001				
E201Y09	AN818D06	Nut - coupling 3/8"	-1.09	629.21	30.72	DPM5481111EAD05-0		DPM5400001	DPM540R001				
		Subsystem	Generator										
		Subsystems	Drain										
E201X08	AN815D06	Union flare fitting 3/8"	-1.09	629.21	30.72	DPM540001CE201		DPM5400001	DPM540R001				
E201Y08	AN818D06	Nut - coupling 3/8"	-1.09	629.21	30.72	DPM5481114EAD04-0		DPM5400001	DPM540R001				
		Subsystem	Turbine										
		Subsystems	Drain										
E201X07	AN815D06	Union flare fitting 3/8"	-1.09	629.21	30.72	DPM540001CE201		DPM5400001	DPM540R001				
E201Y07	AN818D06	Nut - coupling 3/8"	-1.09	629.21	30.72	DPM5481113EAD03-0		DPM5400001	DPM540R001				
		Subsystems	Exhaust										
E201X03	DPM5400010-038	Exhaust fitting, APU	-1.09	629.21	30.72	DPM540001CE201		DPM5400001	DPM540R001				
E201Y03	W901B80	Fitting	-1.09	629.21	30.72	DPM5461112EAE02-8		DPM5400001	DPM540R001				
System	Avionics	Subsystem	Audio										
		Subsystems	Cockpit audio										
WC5219	DPM7292150-501	Cabin avionics harness	10.22	345.25	69.30	DPM792100C		DPM7630002	DPM763R003				

04-Jul-99

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00173710-123009

Report Number: DPM065R001		Report Name: Ground test evaluation and substantiation				Last revision: B		Update: 27-Oct-98			
Ground test											
MRO	Dwg Number	Part Number	Part Name	Weight BLCG	STACG	WLCG	Inst part number	Map dwg number	Map sys report	Ground test description	Date
System: Aircraft											
Subsystem: Structure											
Subsystems:											
A100A	DPM1000000	DPM1000000-501	Aircraft assy	3135.67	0	645.7	39.8	DPM1000000-501	DPM10100001	DPM040R001	22-May-98 Perform ground test of A100A, DPM1000000-501 as requested by
Subsystem: Systems											
Subsystems:											
A102A	DPM1020000	DPM1020000-501	Aircraft structure assy	8958.24	0	643.7	38.8	DPM1000000-501	DPM10200001	DPM040R001	01-Jul-98 Perform ground test of A102A, 01-Jul-98 DPM1020000-501 as requested by
System: APU											
Subsystem: Compressor											
Subsystems: Air Inlet											
E201Y01	DPM6451112	W801B64	Fitting	0.13	-1.1	628.2	30.7	DPM6451112-501	DPM54000001	DPM540R001	28-Jan-98 Perform ground test of E201Y01, W801B64 as requested by ground test
Subsystems: Bleed air											
E201Y02	DPM6621114	W801B40	Fitting	0.08	-1.1	628.2	30.7	DPM6621114-501	DPM54000001	DPM540R001	28-Jan-98 Perform ground test of E201Y02, W801B40 as requested by ground test
Subsystems: Drain											
E201X08	DPM5400010	AN815D08	Union flare fitting 3/8"	0.02	-1.1	628.2	30.7	DPM5400010-501	DPM54000001	DPM540R001	22-Nov-98 Perform ground test of E201X08, AN815D08 as requested by ground test
E201Y08	DPM5481112	AN818D08	Nut - coupling 3/8"	0.02	-1.1	628.2	30.7	DPM5481112-501	DPM54000001	DPM540R001	28-Jan-98 Perform ground test of E201Y08, AN818D08 as requested by ground test
Subsystem: Fire protection											
Subsystems: Fire extinguishing											
E201X10	DPM5400010	AN815D12	Union flare fitting 3/4"	0.03	-1.1	628.2	30.7	DPM5400010-501	DPM55000001	DPM550R001	22-Nov-98 Perform ground test of E201X10, AN815D12 as requested by ground test
E201Y10	DPM5521011	AN818D12	Nut - coupling 3/4"	0.03	-1.1	628.2	30.7	DPM5521011-501	DPM55000001	DPM550R001	28-Jan-98 Perform ground test of E201Y10, AN818D12 as requested by ground test
Subsystem: Fuel											
Subsystems: Drain											
E201X05	DPM5400010	AN815D08	Union flare fitting 3/8"	0.02	-1.1	628.2	30.7	DPM5400010-501	DPM54000001	DPM540R001	22-Nov-98 Perform ground test of E201X05, AN815D08 as requested by ground test
E201Y05	DPM5481111	AN818D08	Nut - coupling 3/8"	0.02	-1.1	628.2	30.7	DPM5481111-501	DPM62000001	DPM620R001	28-Jan-98 Perform ground test of E201Y05, AN818D08 as requested by ground test
Subsystems: Feed											

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04-Jul-98

Report Number: DPM101R006

Report Name: Access doors provision & substantiation

Last revision: B Update: 03-Mar-98

MRD parts access door and bay location

MRD	Dwg Number	Part Number	Part Name	Weight	BLCG	STACG	WLCG	Inst part number	Map dwg number	Map sys report	System	Subsystem	Subsystems Bay
Door: 111-AL Door MRD: A211RA													
R613	DPM7619551	DPM7619551-501	Weather radar antenna	28.347	0.0	158.9	32.8	DPM7619551-501	DPM7619501	DPM761R043	Avionics	Navigation	W/radar 111
R613	DPM7619551	DPM7619551-501	Weather radar antenna	28.347	0.0	158.9	32.8	DPM7619551-501	DPM7619501	DPM761R043	Avionics	Navigation	W/radar 111
R613	DPM7619552	DPM7619552-501	Weather radar antenna	28.191	0.0	158.9	32.8	DPM7619552-501	DPM7619501	DPM761R043	Avionics	Navigation	W/radar 111
R613	DPM7619552	DPM7619552-501	Weather radar antenna	28.191	0.0	158.9	32.8	DPM7619552-501	DPM7619501	DPM761R043	Avionics	Navigation	W/radar 111
R613J	DPM7619551	MS90335C24B56RReceptacle		0.063	0.0	158.9	32.8	DPM7619551-501	DPM7619501	DPM761R043	Avionics	Navigation	W/radar 111
R613P	DPM7619551	MS90335C24B56RPlug		0.061	0.0	158.9	32.8	DPM7619551-501	DPM7619501	DPM761R043	Avionics	Navigation	Weather radar 111
ZFTJ025	DPM0666510	DPM0666510-501	Flight test pilot static cone	1.320	22.8	157.3	38.7	DPM0666500-501	DPM0660001	DPM066R002	Flight test	Flight control	Anemometry 111
ZFTJ026	DPM0666510	DPM0666510-502	Flight test pilot static cone	1.320	-22.8	157.3	38.7	DPM0666500-501	DPM0660001	DPM066R002	Flight test	Flight control	Anemometry 111
ZFTJ027	DPM0666511	DPM0666511-501	Flight test, pilot static sensor	1.460	18.9	161.4	31.9	DPM0666500-501	DPM0660001	DPM066R002	Flight test	Flight control	Anemometry 111
ZFTJ028	DPM0666511	DPM0666511-502	Flight test, pilot static sensor	1.460	-18.9	161.4	31.9	DPM0666500-501	DPM0660001	DPM066R002	Flight test	Flight control	Anemometry 111
ZFTR001	DPM0662111	DPM0662111-501	Flight test radome	61.320	0.0	160.0	33.0	DPM0662110-501	DPM0660001	DPM066R002	Flight test	Structure	Nose 111

Door: 112-AR Door MRD: A212SR1													
H501	DPM6160010	DPM6160010-501	Selector valve	1.193	-24.4	191.1	20.5	DPM6161400-502	DPM6100001	DPM610R001	Fluid	Hydraulic	Landing gear 112
H501	DPM6160010	DPM6160010-501	Selector valve	1.193	-24.4	191.1	20.5	DPM6161400-502	DPM6100001	DPM610R001	Fluid	Hydraulic	Landing gear 112
H501	DPM6160011	DPM6160011-501	Selector valve	1.277	-24.4	191.1	20.5	DPM6161410-502	DPM6100001	DPM610R001	Fluid	Hydraulic	Landing gear 112
H501	DPM6160011	DPM6160011-501	Selector valve	1.277	-24.4	191.1	20.5	DPM6161410-502	DPM6100001	DPM610R001	Fluid	Hydraulic	Landing gear 112
H501X1	DPM6160010	M825252-04	End male fitting 0.25"	0.035	-24.4	191.1	20.5	DPM6160010-501	DPM6100001	DPM610R001	Fluid	Hydraulic	Landing gear 112
H501X2	DPM6160010	M825252-04	End male fitting 0.25"	0.035	-24.4	191.1	20.5	DPM6160010-501	DPM6100001	DPM610R001	Fluid	Hydraulic	Landing gear 112

Report Number: DPM101R005 Report Name: Access doors provision & substantiation Last revision: B Update: 03-Mar-98

MRD parts bay location report

MRD	Dwg Number	Part Number	Part Name	Weight BLCG	STAGC	WLCG	Inst part number	Map dwg number	Map sys report	System	Subsystem	Door
Bay: 111	Bay Name: Radome											
R513	DPM7619551	DPM7619551-501	Weather radar antenna	26.347	0.0	158.9	32.8	DPM7619501	DPM7619501	Avionics	Navigation	W/radar 111-AL
R513	DPM7619551	DPM7619551-501	Weather radar antenna	26.347	0.0	158.9	32.8	DPM7619501	DPM7619501	Avionics	Navigation	W/radar 111-AL
R513	DPM7619552	DPM7619552-501	Weather radar antenna	26.191	0.0	158.9	32.8	DPM7619501	DPM7619501	Avionics	Navigation	W/radar 111-AL
R513	DPM7619552	DPM7619552-501	Weather radar antenna	26.191	0.0	158.9	32.8	DPM7619501	DPM7619501	Avionics	Navigation	W/radar 111-AL
R513J	DPM7619551	M890335C24B66R	Receptacle	0.053	0.0	158.9	32.8	DPM7619501	DPM7619501	Avionics	Navigation	W/radar 111-AL
R513P	DPM7281250	M890335C24B58F	Plug	0.051	0.0	158.9	32.8	DPM7619501	DPM7619501	Avionics	Navigation	Weather radar 111-AL
ZFTJ025	DPM0666510	DPM0666510-501	Flight test pilot static cone	1.320	22.8	157.3	38.7	DPM0666500-501	DPM0666500-501	Flight test	Flight control	Anemometry 111-AL
ZFTJ026	DPM0666510	DPM0666510-502	Flight test pilot static cone	1.320	-22.8	157.3	38.7	DPM0666500-501	DPM0666500-501	Flight test	Flight control	Anemometry 111-AL
ZFTJ027	DPM0666511	DPM0666511-501	Flight test pilot static sensor	1.460	18.9	161.4	31.9	DPM0666500-501	DPM0666500-501	Flight test	Flight control	Anemometry 111-AL
ZFTJ028	DPM0666511	DPM0666511-502	Flight test pilot static sensor	1.460	-18.9	161.4	31.9	DPM0666500-501	DPM0666500-501	Flight test	Flight control	Anemometry 111-AL
ZFTR001	DPM0662111	DPM0662111-501	Flight test radome	61.320	0.0	160.0	33.0	DPM0662110-501	DPM0662110-501	Flight test	Structure	Nose 111-AL

Bay: 112	Bay Name: Generator bay											
H501	DPM6160010	DPM6160010-501	Selector valve	1.193	-24.4	191.1	20.5	DPM6191400-502	DPM6100001	Fluid	Hydraulic	Landing gear 112-AR
H501	DPM6160010	DPM6160010-501	Selector valve	1.193	-24.4	191.1	20.5	DPM6191400-502	DPM6100001	Fluid	Hydraulic	Landing gear 112-AR
H501	DPM6160011	DPM6160011-501	Selector valve	1.277	-24.4	191.1	20.5	DPM6191410-502	DPM6100001	Fluid	Hydraulic	Landing gear 112-AR
H501	DPM6160011	DPM6160011-501	Selector valve	1.277	-24.4	191.1	20.5	DPM6191410-502	DPM6100001	Fluid	Hydraulic	Landing gear 112-AR
H501X1	DPM6160010	M825252-04	End male fitting 0.25"	0.035	-24.4	191.1	20.5	DPM6160010-501	DPM6100001	Fluid	Hydraulic	Landing gear 112-AR
H501X2	DPM6160010	M825252-04	End male fitting 0.25"	0.035	-24.4	191.1	20.5	DPM6160010-501	DPM6100001	Fluid	Hydraulic	Landing gear 112-AR

Report Number: DPM081R001
Eng Name: Atherton Dennis

Report Name: Reliability substantiation
Position: Reliability engineer

Last revision: D **Date:** 23-Apr-98
Dept: 2383 **Phone:** 2384

MRD Reliability report

MRD	Dwg Number	Part Number	Part Name	Width	Len	Hdg	Dia	Thick	Material	Weld	Ins	Part Number	BL	STA	WL	Map	Map	System	Relia
				Inch	Inch	ht,	met	ness,		ht	in		CG,	Inch	Inch	Drawing	Number	Report	bility
							er,	in	Inch	lb									
System: APU																			
Subsystem: Compressor																			
Subsystems: Air Inlet																			
E201X01	DPM5400010	DPM5400010-047	Inlet fitting, APU	0.00	0.00	0.00	0.00	0.00		0.10		DPM5400010-501	-1.1	628.2	30.7	DPM5400001	DPM540R001	4.26E-07	
E201Y01	DPM5451112	W901B64	Fitting	0.00	0.00	0.00	0.00	0.00		0.13		DPM5451112-501	-1.1	628.2	30.7	DPM5400001	DPM540R001	3.65E-07	
Subsystems: Bleed air																			
E201X02	DPM5400010	DPM5400010-052	Bleed air fitting, APU	0.00	0.00	0.00	0.00	0.00		0.08		DPM5400010-501	-1.1	628.2	30.7	DPM5400001	DPM540R001	9.37E-08	
E201Y02	DPM6621114	W901B40	Fitting	0.00	0.00	0.00	0.00	0.00		0.08		DPM6621114-501	-1.1	628.2	30.7	DPM5400001	DPM540R001	2.85E-08	
Subsystems: Drain																			
E201X08	DPM5400010	AN816D08	Union flare fitting 3/8"	0.00	0.00	0.00	0.38			0.02		DPM5400010-501	-1.1	628.2	30.7	DPM5400001	DPM540R001	3.48E-07	
E201Y08	DPM5481112	AN818D08	Nut - coupling 3/8"	0.00	0.00	0.00	0.00			0.02		DPM5481112-501	-1.1	628.2	30.7	DPM5400001	DPM540R001	2.85E-08	
Subsystem: ECS																			
Subsystems: Compressor																			
E201X12	DPM5400010	DPM5400010-023	Shaft, APU compressor	0.00	0.00	0.00	0.00			0.15		DPM5400010-501	-1.1	628.2	30.7	DPM5400001	DPM540R001	2.85E-08	
Subsystem: Electrical																			
Subsystems: Starter/generator																			
E201X11	DPM5400010	DPM5400010-015	Shaft, APU starter/genera	0.00	0.00	0.00	0.00			0.15		DPM5400010-501	-1.1	628.2	30.7	DPM5400001	DPM540R001	6.72E-08	
Subsystem: Fire protection																			
Subsystems: Fire extinguishing																			
E201X10	DPM5400010	AN816D12	Union flare fitting 3/4"	0.00	0.00	0.00	0.75			0.03		DPM5400010-501	-1.1	628.2	30.7	DPM5500001	DPM550R001	6.38E-08	
E201Y10	DPM5621011	AN818D12	Nut - coupling 3/4"	0.00	0.00	0.00	0.00			0.03		DPM5621011-501	-1.1	628.2	30.7	DPM5500001	DPM550R001	9.21E-08	
Subsystem: Fuel																			
Subsystems: Drain																			
E201X05	DPM5400010	AN816D08	Union flare fitting 3/8"	0.00	0.00	0.00	0.38			0.02		DPM5400010-501	-1.1	628.2	30.7	DPM5400001	DPM540R001	3.48E-07	
E201Y05	DPM5481111	AN818D08	Nut - coupling 3/8"	0.00	0.00	0.00	0.00			0.02		DPM5481111-501	-1.1	628.2	30.7	DPM6200001	DPM620R001	2.85E-08	
Subsystems: Feed																			
E201X04	DPM5400010	W901B08	Ferrule	0.00	0.00	0.00	0.00			0.03		DPM5400010-501	-1.1	628.2	30.7	DPM5400001	DPM540R001	6.05E-07	
E201Y04	DPM6211124	W901B08	Ferrule	0.00	0.00	0.00	0.00			0.03		DPM6211124-501	-1.1	628.2	30.7	DPM6200001	DPM620R001	5.05E-07	
Subsystem: Gearbox																			
Subsystems: Drain																			

RepNumber: DPM101R008 Report Name: Structure and systems penetration & substantiation Last revision: B Date: 18-Jul-98

MRD Structure by systems penetration report

MRD	Dwg Number	Part Number	Part Name	From BL	To BL	From STA	To STA	WL	Item	BL	STA	WL	System	Subsystem	Notes		
										Inch	Inch						
AFR27T	DPM2240014	DPM2240014-001	Frame 27 upper	-22.0	22.0	510.0	510.0	99.2	104.0	11-19.0	510.0	99.5	2.25	WC1816	Electrical Power plant	Generator control RH	
AFR27T	DPM2240014	DPM2240014-001	Frame 27 upper	-22.0	22.0	510.0	510.0	99.2	104.0	11-19.0	510.0	99.5	2.25	WC1810	Electrical Power plant	Engine B control	
AFR27T	DPM2240014	DPM2240014-001	Frame 27 upper	-22.0	22.0	510.0	510.0	99.2	104.0	11-19.0	510.0	99.5	2.25	WC1808	Electrical Power plant	Engine B Indication	
AFR27T	DPM2240014	DPM2240014-001	Frame 27 upper	-22.0	22.0	510.0	510.0	99.2	104.0	11-19.0	510.0	99.5	2.25	WC1804	Electrical Power plant	Engine A Indication	
AFR27T	DPM2240014	DPM2240014-001	Frame 27 upper	-22.0	22.0	510.0	510.0	99.2	104.0	11-19.0	510.0	99.5	2.25	WC1818	Electrical Power plant	Engine min oil	
AFR27T	DPM2240014	DPM2240014-001	Frame 27 upper	-22.0	22.0	510.0	510.0	99.2	104.0	11-19.0	510.0	99.5	2.25	WC1809	Electrical Power plant	Engine A control	
AFR27T	DPM2240014	DPM2240014-001	Frame 27 upper	-22.0	22.0	510.0	510.0	99.2	104.0	11-19.0	510.0	99.5	2.25	WC1814	Electrical Power plant	Thrust reverser	
AFR27T	DPM2240014	DPM2240014-001	Frame 27 upper	-22.0	22.0	510.0	510.0	99.2	104.0	11-19.0	510.0	99.5	2.25	WC1812	Electrical Power plant	Thrust reverser	
AFR27T	DPM2240014	DPM2240014-001	Frame 27 upper	-22.0	22.0	510.0	510.0	99.2	104.0	91	19.5	510.0	100.5	0.25	AFR27T	Structure Fuelage	Aft cabin
AFR27T	DPM2240014	DPM2240014-001	Frame 27 upper	-22.0	22.0	510.0	510.0	99.2	104.0	92	0.0	510.0	101.5	0.25	AFR27T	Structure Fuelage	Aft cabin
AFR27T	DPM2240014	DPM2240014-001	Frame 27 upper	-22.0	22.0	510.0	510.0	99.2	104.0	93-19.5	510.0	102.5	0.25	AFR27T	Structure Fuelage	Aft cabin	
AFR28B	DPM2240021	DPM2240021-003	Frame 28 lower	-13.0	13.0	522.0	522.0	0.0	1.6	1	11.0	522.0	8.0	0.88	C349	Mechanical control	Rudder
AFR28B	DPM2240021	DPM2240021-003	Frame 28 lower	-13.0	13.0	522.0	522.0	0.0	1.6	2	3.7	522.0	1.4	0.75	C263	Mechanical control	Elevator
AFR28B	DPM2240021	DPM2240021-003	Frame 28 lower	-13.0	13.0	522.0	522.0	0.0	1.6	3	2.7	522.0	1.4	0.75	C261	Mechanical control	Elevator
AFR28B	DPM2240021	DPM2240021-003	Frame 28 lower	-13.0	13.0	522.0	522.0	0.0	1.6	4	0.0	522.0	12.0	3.50	VCP04-48	Fluid	Cockpit distribution
AFR28B	DPM2240021	DPM2240021-003	Frame 28 lower	-13.0	13.0	522.0	522.0	0.0	1.6	5	-8.0	522.0	22.0	2.38	VDE05-10	Fluid	De-icing
AFR28B	DPM2240021	DPM2240021-003	Frame 28 lower	-13.0	13.0	522.0	522.0	0.0	1.6	6-11.0	522.0	8.0	0.88	C350	Mechanical control	Rudder	

CONFIDENTIAL

RepNumber: DPM101R008 Report Name: Structure and systems penetration & substantiation Last revision: B Date: 16-Jul-98

MRD System by structure penetration report

MRD	Dwg Number	Part Number	Part Name	From BL	To BL	To STA	From ToWL	Item BL	STA	WL	System	Subsystem	Subsystems	Notes
System: Avionics														
Subsystem: Audio														
WC5218	DPM7282150	DPM7282150-501	Cabin avionics harness	8.0	12.4	269.2	421.3	89.9	48.7	3 11.0	382.0	100.5	2.25	AFR18T Structure Fuselage Fwd cabin
WC5219	DPM7282150	DPM7282150-501	Cabin avionics harness	8.0	12.4	269.2	421.3	89.9	48.7	3 11.0	384.0	100.5	2.25	AFR18T Structure Fuselage Fwd cabin
WC5219	DPM7282150	DPM7282150-501	Cabin avionics harness	8.0	12.4	269.2	421.3	89.9	48.7	3 11.0	386.0	100.5	2.25	AFR19T Structure Fuselage Fwd cabin
WC5219	DPM7282150	DPM7282150-501	Cabin avionics harness	8.0	12.4	269.2	421.3	89.9	48.7	3 11.0	409.0	100.5	2.25	AFR20T Structure Fuselage Passenger cabin
WC5219	DPM7282150	DPM7282150-501	Cabin avionics harness	8.0	12.4	269.2	421.3	89.9	48.7	3 11.0	388.0	100.5	2.25	AFR17T Structure Fuselage Fwd cabin
WC5219	DPM7282150	DPM7282150-501	Cabin avionics harness	8.0	12.4	269.2	421.3	89.9	48.7	3 11.0	340.0	100.5	2.25	AFR15T Structure Fuselage Fwd cabin
WC5218	DPM7282150	DPM7282150-501	Cabin avionics harness	8.0	12.4	269.2	421.3	89.9	48.7	3 11.0	310.0	100.5	2.25	AFR12T Structure Fuselage Fwd cabin
WC5219	DPM7282150	DPM7282150-501	Cabin avionics harness	8.0	12.4	269.2	421.3	89.9	48.7	3 11.0	290.0	100.5	2.25	AFR10T Structure Fuselage Fwd cabin
WC5218	DPM7282150	DPM7282150-501	Cabin avionics harness	8.0	12.4	269.2	421.3	89.9	48.7	3 11.0	330.0	100.5	2.25	AFR14T Structure Fuselage Fwd cabin
WC5218	DPM7282150	DPM7282150-501	Cabin avionics harness	8.0	12.4	269.2	421.3	89.9	48.7	3 11.0	320.0	100.5	2.25	AFR13T Structure Fuselage Fwd cabin
WC5218	DPM7282150	DPM7282150-501	Cabin avionics harness	8.0	12.4	269.2	421.3	89.9	48.7	3 11.0	300.0	100.5	2.25	AFR11T Structure Fuselage Fwd cabin
WC5218	DPM7282150	DPM7282150-501	Cabin avionics harness	8.0	12.4	269.2	421.3	89.9	48.7	4 11.0	280.0	101.0	2.25	AFR09T Structure Fuselage Fwd cabin
WC5220	DPM7282150	DPM7282150-502	Cabin avionics harness	-8.0	-12.4	269.2	421.3	89.9	48.7	8 -7.0	280.0	100.0	2.25	AFR09T Structure Fuselage Fwd cabin
WC5220	DPM7282150	DPM7282150-502	Cabin avionics harness	-8.0	-12.4	269.2	421.3	89.9	48.7	9 -11.0	300.0	100.5	2.25	AFR11T Structure Fuselage Fwd cabin
WC5220	DPM7282150	DPM7282150-502	Cabin avionics harness	-8.0	-12.4	269.2	421.3	89.9	48.7	9 -11.0	330.0	100.5	2.25	AFR14T Structure Fuselage Fwd cabin
WC5220	DPM7282150	DPM7282150-502	Cabin avionics harness	-8.0	-12.4	269.2	421.3	89.9	48.7	9 -11.0	399.0	100.5	2.25	AFR19T Structure Fuselage Fwd cabin

Report Number: DPM741R001 Report Name: Engine control electrical system operation aRev: D Date: 18-Mar-98

Technical data

Position: Electrical engineer Name: Tyler Lyv Dept: 2372 Phone 6035

MRD	Dwg Number	Part Number	Part Name	Inst Part Number	System	Subsystem	Tray Part Number	Capacity	Power, by, lt	kw	Cooling type	Heat dissipation, wt	Attachment	Notes
E015	DPM7410011	DPM7410011-501	Thrust reverser control box		DPM6230002-501	Electrica Engine	Thrust reverser				11 Ambient		4 bolts 1/4"	
E015	DPM7410012	DPM7410012-501	Thrust reverser control box		DPM6230000-501	Electrica Engine	Thrust reverser				12 Ambient		4 bolts 1/4"	
E016	DPM7410011	DPM7410011-501	Thrust reverser control box		DPM6230002-502	Electrica Engine	Thrust reverser				11 Ambient		4 bolts 1/4"	
E016	DPM7410012	DPM7410012-501	Thrust reverser control box		DPM6230000-502	Electrica Engine	Thrust reverser				12 Ambient		4 bolts 1/4"	

SEng	742	Position	APU control electrical engineer	Manufacture Engineer Name	Maddison Carl	Dept	2372	Phone	9289
P121	DPM7420030	DPM7420030-501	GCU, APU starter/generator		DPM7932000-502	Power generati	APU power		
P121	DPM7420032	DPM7420032-501	GCU, APU starter/generator		DPM7932002-502	Power generati	APU power		
P131	DPM7420040	DPM7420040-501	Electronic control unit - ECU		DPM7932000-502	Power generati	APU power		
P131	DPM7420041	DPM7420041-501	Electronic control unit - ECU		DPM7932002-502	Power generati	APU power		
P137	DPM7420060	DPM7420060-501	Battery 27AH		DPM7932000-502	Power generati	DC power		
P137	DPM7420061	DPM7420061-501	Battery 27AH		DPM7932002-502	Power generati	DC power		

SEng	743	Position	Flight control electrical engineer	Manufacture Engineer Name	Carrington David	Dept	2372	Phone	9255
C101A	DPM7430051	DPM7430051-501	Primary servo		DPM4210020-501	Avionics control	Alleron		
C101A	DPM7430057	DPM7430057-501	Primary servo		DPM4210021-501	Avionics control	Alleron		
C103	DPM7430010	DPM7430010-501	Trim actuator		DPM4210000-501	Electrica control	Alleron		
C103	DPM7430011	DPM7430011-501	Trim actuator		DPM4210002-501	Electrica control	Alleron		
C105	DPM7430061	DPM7430061-501	Alleron trim switch		DPM4210000-501	Electrica control	Alleron		
C105	DPM7430069	DPM7430069-501	Alleron trim switch		DPM4210002-501	Electrica control	Alleron		

RepNumber: DPM048R001

Report Name: Weight & balance substantiation

Last revision: A Date: 14-Mar-88

MRD Weight report

MRD	Dwg Number	Part Number	Part Name	Width inch	Len gth, inch	Hdg ht, inch	Dia Thick met er, inch	Material ht, in lb	Wgt ht, in lb	Target lb	InstPartNumber	BL CG, inch	STA CG, inch	WL CG, inch	Map Drawing Number	Map System Report
System: Aircraft																

Subsystem: Structure

Subsystems:					
100A	DPM1000000	DPM1000000-501	Altcraft asy	0.00	0.00 0.00 0.00 0.000
					35.67514.673 DPM1000000-501 0.0 645.7 39.8 DPM1010001 DPM040R001

Subsystem: Systems

Subsystems:				
		752.00	821.00	0.00
102A	DPM1020000	DPM1020000-501	Alorcraft structure Assy	39.24411,242 DPM100000-501
				0.0 545.7 39.8 DPM1020001 DPM040R001

System: APU

Subsystem: Compressor

Subsystems: Air Inlet			
Item	QTY	Part Number	Part Description
1	1	10000001	10000001
2	1	10000001	10000001
3	1	10000001	10000001
4	1	10000001	10000001
5	1	10000001	10000001
6	1	10000001	10000001
7	1	10000001	10000001
8	1	10000001	10000001
9	1	10000001	10000001
10	1	10000001	10000001
11	1	10000001	10000001
12	1	10000001	10000001
13	1	10000001	10000001
14	1	10000001	10000001
15	1	10000001	10000001
16	1	10000001	10000001
17	1	10000001	10000001
18	1	10000001	10000001
19	1	10000001	10000001
20	1	10000001	10000001
21	1	10000001	10000001
22	1	10000001	10000001
23	1	10000001	10000001
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25	1	10000001	10000001
26	1	10000001	10000001
27	1	10000001	10000001
28	1	10000001	10000001
29	1	10000001	10000001
30	1	10000001	10000001
31	1	10000001	10000001
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89	1	10000001	10000001
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91	1	10000001	10000001
92	1	10000001	10000001
93	1	10000001	10000001
94	1	10000001	10000001
95	1	10000001	10000001
96	1	10000001	10000001
97	1	10000001	10000001
98	1	10000001	10000001
99	1	10000001	10000001
100	1	10000001	10000001

[illegible]

201Y01	DPM56112	W801B84	Fitting	0.00	0.00	0.00	0.128	-0.064	DPM543112-2001	-1.1	V29.2	SW:	SIMV100001	EPI.MS100001
<hr/>														
													Cubevolume:	Blood ml/s
<hr/>														

[illegible][illegible]

Subsystems: Drain

2201X08	DPM5400010 AN815D08	Union flare fitting 3/8"	0.00	0.00	0.00	0.38	0.019	0.019	DPM5400010-501	-1.1	629.2	30.7	DPM5400001	DPM540R001
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	Nut - coupling 3/8"	0.00	0.00	0.00	-1.1	629.2	30.7	DPM5400001	DPM540R001
201Y06 DPM5481112 AN818D06								0.021	DPM548112-501

Subsystem: ECS

Subsystems: Compressor

	0.149	0.147	DPM5400010-501	-1.1	628.2	30.7	DPM5400001	DPM54URU01
2X12 DPM5400010-D23	Shan,	APU compressor	0.00	0.00	0.00	0.00		

Subsystem: Electrical

Subsystems: Starter/generator	
Q 452	Q 452
Q 454	Q 454
Q 456	Q 456
Q 458	Q 458
Q 460	Q 460
Q 462	Q 462
Q 464	Q 464
Q 466	Q 466
Q 468	Q 468
Q 470	Q 470
Q 472	Q 472
Q 474	Q 474
Q 476	Q 476
Q 478	Q 478
Q 480	Q 480
Q 482	Q 482
Q 484	Q 484
Q 486	Q 486
Q 488	Q 488
Q 490	Q 490
Q 492	Q 492
Q 494	Q 494
Q 496	Q 496
Q 498	Q 498
Q 500	Q 500
Q 502	Q 502
Q 504	Q 504
Q 506	Q 506
Q 508	Q 508
Q 510	Q 510
Q 512	Q 512
Q 514	Q 514
Q 516	Q 516
Q 518	Q 518
Q 520	Q 520
Q 522	Q 522
Q 524	Q 524
Q 526	Q 526
Q 528	Q 528
Q 530	Q 530
Q 532	Q 532
Q 534	Q 534
Q 536	Q 536
Q 538	Q 538
Q 540	Q 540
Q 542	Q 542
Q 544	Q 544
Q 546	Q 546
Q 548	Q 548
Q 550	Q 550
Q 552	Q 552
Q 554	Q 554
Q 556	Q 556
Q 558	Q 558
Q 560	Q 560
Q 562	Q 562
Q 564	Q 564
Q 566	Q 566
Q 568	Q 568
Q 570	Q 570
Q 572	Q 572
Q 574	Q 574
Q 576	Q 576
Q 578	Q 578
Q 580	Q 580
Q 582	Q 582
Q 584	Q 584
Q 586	Q 586
Q 588	Q 588
Q 590	Q 590
Q 592	Q 592
Q 594	Q 594
Q 596	Q 596
Q 598	Q 598
Q 600	Q 600
Q 602	Q 602
Q 604	Q 604
Q 606	Q 606
Q 608	Q 608
Q 610	Q 610
Q 612	Q 612
Q 614	Q 614
Q 616	Q 616
Q 618	Q 618
Q 620	Q 620
Q 622	Q 622
Q 624	Q 624
Q 626	Q 626
Q 628	Q 628
Q 630	Q 630
Q 632	Q 632
Q 634	Q 634
Q 636	Q 636
Q 638	Q 638
Q 640	Q 640
Q 642	Q 642
Q 644	Q 644
Q 646	Q 646
Q 648	Q 648
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Q 652	Q 652
Q 654	Q 654
Q 656	Q 656
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Q 660	Q 660
Q 662	Q 662
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Q 666	Q 666
Q 668	Q 668
Q 670	Q 670
Q 672	Q 672
Q 674	Q 674
Q 676	Q 676
Q 678	Q 678
Q 680	Q 680
Q 682	Q 682
Q 684	Q 684
Q 686	Q 686
Q 688	Q 688
Q 690	Q 690
Q 692	Q 692
Q 694	Q 694
Q 696	Q 696
Q 698	Q 698
Q 700	Q 700
Q 702	Q 702
Q 704	Q 704
Q 706	Q 706
Q 708	Q 708
Q 710	Q 710
Q 712	Q 712
Q 714	Q 714
Q 716	Q 716
Q 718	Q 718
Q 720	Q 720
Q 722	Q 722
Q 724	Q 724
Q 726	Q 726
Q 728	Q 728
Q 730	Q 730

[illegible]

Subsystem: Fire protection

Subsystems: Fire extinguishing

Subsystem, File Extension	11/28/88	12/01/88	01/04/89	01/11/89	01/18/89	01/25/89	02/01/89	02/08/89	02/15/89	02/22/89	03/01/89	03/08/89	03/15/89	03/22/89	03/29/89	04/05/89	04/12/89	04/19/89	04/26/89	05/03/89	05/10/89	05/17/89	05/24/89	05/31/89	06/07/89	06/14/89	06/21/89	06/28/89	07/05/89	07/12/89	07/19/89	07/26/89	08/02/89	08/09/89	08/16/89	08/23/89	08/30/89	09/06/89	09/13/89	09/20/89	09/27/89	10/04/89	10/11/89	10/18/89	10/25/89	11/01/89	11/08/89	11/15/89	11/22/89	11/29/89	12/06/89	12/13/89	12/20/89	12/27/89	01/03/90	01/10/90	01/17/90	01/24/90	01/31/90	02/07/90	02/14/90	02/21/90	02/28/90	03/06/90	03/13/90	03/20/90	03/27/90	04/03/90	04/10/90	04/17/90	04/24/90	05/01/90	05/08/90	05/15/90	05/22/90	05/29/90	06/05/90	06/12/90	06/19/90	06/26/90	07/03/90	07/10/90	07/17/90	07/24/90	07/31/90	08/07/90	08/14/90	08/21/90	08/28/90	09/04/90	09/11/90	09/18/90	09/25/90	10/02/90	10/09/90	10/16/90	10/23/90	10/30/90	11/06/90	11/13/90	11/20/90	11/27/90	12/04/90	12/11/90	12/18/90	12/25/90	01/01/91	01/08/91	01/15/91	01/22/91	01/29/91	02/05/91	02/12/91	02/19/91	02/26/91	03/05/91	03/12/91	03/19/91	03/26/91	04/02/91	04/09/91	04/16/91	04/23/91	04/30/91	05/07/91	05/14/91	05/21/91	05/28/91	06/04/91	06/11/91	06/18/91	06/25/91	07/02/91	07/09/91	07/16/91	07/23/91	07/30/91	08/06/91	08/13/91	08/20/91	08/27/91	09/03/91	09/10/91	09/17/91	09/24/91	10/01/91	10/08/91	10/15/91	10/22/91	10/29/91	11/05/91	11/12/91	11/19/91	11/26/91	12/03/91	12/10/91	12/17/91	12/24/91	12/31/91	01/07/92	01/14/92	01/21/92	01/28/92	02/04/92	02/11/92	02/18/92	02/25/92	03/04/92	03/11/92	03/18/92	03/25/92	04/01/92	04/08/92	04/15/92	04/22/92	04/29/92	05/06/92	05/13/92	05/20/92	05/27/92	06/03/92	06/10/92	06/17/92	06/24/92	07/01/92	07/08/92	07/15/92	07/22/92	07/29/92	08/05/92	08/12/92	08/19/92	08/26/92	09/02/92	09/09/92	09/16/92	09/23/92	09/30/92	10/07/92	10/14/92	10/21/92	10/28/92	11/04/92	11/11/92	11/18/92	11/25/92	12/02/92	12/09/92	12/16/92	12/23/92	12/30/92	01/06/93	01/13/93	01/20/93	01/27/93	02/03/93	02/10/93	02/17/93	02/24/93	03/03/93	03/10/93	03/17/93	03/24/93	04/01/93	04/08/93	04/15/93	04/22/93	04/29/93	05/06/93	05/13/93	05/20/93	05/27/93	06/03/93	06/10/93	06/17/93	06/24/93	07/01/93	07/08/93	07/15/93	07/22/93	07/29/93	08/05/93	08/12/93	08/19/93	08/26/93	09/02/93	09/09/93	09/16/93	09/23/93	09/30/93	10/07/93	10/14/93	10/21/93	10/28/93	11/04/93	11/11/93	11/18/93	11/25/93	12/02/93	12/09/93	12/16/93	12/23/93	12/30/93	01/06/94	01/13/94	01/20/94	01/27/94	02/03/94	02/10/94	02/17/94	02/24/94	03/03/94	03/10/94	03/17/94	03/24/94	04/01/94	04/08/94	04/15/94	04/22/94	04/29/94	05/06/94	05/13/94	05/20/94	05/27/94	06/03/94	06/10/94	06/17/94	06/24/94	07/01/94	07/08/94	07/15/94
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[illegible][illegible]

Subsystems: 1001

Subsystems: Brain

Part Number	Part Description	QTY	UNIT PRICE	TOTAL PRICE	TAX	NET TOTAL	DISCOUNT	GRAND TOTAL
E201X05 DPM5400010 AN815D06	Union flare fitting 3/8"	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		0.019	0.018	DPM5400010-501	-1.1	629.2	30.7	DPM5400001 DPM540R001

Orders report

Part Number	Part Name	InstPartNumber	Part Name	Order Date	Manufacturer	Vendor Number	Effect	Qty	Total	Status
							from	ct to		
DPM2812101-001	Cockpit floor, LH		DPM2812100-501 Cockpit floor assy, LH	17-Apr-97	Press Vision		1	4	1	4
DPM2812101-002	Cockpit floor, RH		DPM2812100-502 Cockpit floor assy, RH	08-May-97	Press Vision		1	4	1	4
DPM2812101-003	Cockpit floor, centre		DPM2812100-503 Cockpit floor assy, centre	12-Feb-97	Press Vision		1	4	1	4
DPM2812101-011	Cockpit floor LH, panel		DPM2812100-501 Cockpit floor assy, LH	16-Feb-97	Press Vision		1	4	1	4
DPM2812101-012	Cockpit floor RH, panel		DPM2812100-502 Cockpit floor assy, RH	14-Feb-97	Press Vision		1	4	1	4
DPM2812101-021	Cockpit floor LH, panel		DPM2812100-501 Cockpit floor assy, LH	13-Feb-97	Press Vision		1	4	1	4
DPM2812101-022	Cockpit floor RH, panel		DPM2812100-502 Cockpit floor assy, RH	18-Feb-97	Press Vision		1	4	1	4
DPM2812101-027	Cockpit floor LH, panel		DPM2812100-501 Cockpit floor assy, LH	08-May-97	Press Vision		1	4	1	4
DPM2812101-028	Cockpit floor RH, panel		DPM2812100-502 Cockpit floor assy, RH	08-May-97	Press Vision		1	4	1	4
DPM2812101-033	Cockpit floor panel, centre		DPM2812100-503 Cockpit floor assy, centre	23-Jan-97	Press Vision		1	4	1	4
DPM2812101-041	Cockpit floor LH, panel		DPM2812100-501 Cockpit floor assy, LH	08-May-97	Press Vision		1	4	1	4
DPM2812101-042	Cockpit floor RH, panel		DPM2812100-502 Cockpit floor assy, RH	08-May-97	Press Vision		1	4	1	4
DPM2812101-051	Cockpit floor LH, panel		DPM2812100-501 Cockpit floor assy, LH	15-Apr-97	Press Vision		1	4	1	4
DPM2812101-052	Cockpit floor RH, panel		DPM2812100-502 Cockpit floor assy, RH	08-May-97	Press Vision		1	4	1	4
DPM2812101-081	Cockpit floor LH, panel		DPM2812100-501 Cockpit floor assy, LH	08-May-97	Press Vision		1	4	1	4
DPM2812101-082	Cockpit floor RH, panel		DPM2812100-502 Cockpit floor assy, RH	08-May-97	Press Vision		1	4	1	4
DPM8113001-001	Cockpit interior wall, LH		DPM8113000-501 Cockpit interior furnishing assy	21-Apr-97	Compo Interior		1	4	1	4
DPM8113001-002	Cockpit interior wall, RH		DPM8113000-501 Cockpit interior furnishing assy	03-Jul-97	Compo Interior		1	4	1	4
DPM8113001-003	Cockpit interior ceiling		DPM8113000-501 Cockpit interior furnishing assy	03-Jul-97	Compo Interior		1	4	1	4
DPM8113001-004	Cockpit interior cockpit/cabin partition		DPM8113000-501 Cockpit interior furnishing assy	03-Jul-97	Compo Interior		1	4	1	4
PEng 9	Position Project manufacturing engineer		PEName Tuman Larry	Dept 2210	Phone 6442	Fax 7672				
MEng 83	Position Production centre fus. str. engineer		MENName Jones David	Dept 3461	Phone 2341	Fax 7035				
DPM0745000-501	Jlg, Fuselage passenger section as DPM0743000-501		Jlg, Fuselage assy	21-Jun-97	MasterTool		1	1	1	1
DPM0745010-501	Jlg, Fuselage passenger section as DPM0745000-501		Jlg, Fuselage passenger section assy	25-Jun-97	MasterTool		1	1	1	1
DPM0745011-501	Jlg, Frame 9 assy		Jlg, Frame 9 assy	21-Jun-97	MasterTool		1	1	1	1
DPM0745012-501	Jlg, Frame 9 RH		Jlg, Frame 9 assy	24-Apr-97	MasterTool		1	1	1	1
DPM0745013-501	Jlg, Frame 9 lower		Jlg, Frame 9 assy	12-Jan-97	MasterTool		1	1	1	1
DPM0745014-501	Jlg, Frame 9 upper		Jlg, Frame 9 assy	12-Jun-97	MasterTool		1	1	1	1
DPM0745020-501	Jlg, Frame 10 assy		Jlg, Fuselage passenger section assy	28-Feb-97	MasterTool		1	1	1	1
DPM0745021-501	Jlg, Frame 10 LH		Jlg, Frame 10 assy	01-Apr-97	MasterTool		1	1	1	1
DPM0745021-502	Jlg, Frame 10 RH		Jlg, Frame 10 assy	18-May-97	MasterTool		1	1	1	1
DPM0745021-503	Jlg, Frame 10 lower		Jlg, Frame 10 assy	13-Mar-97	MasterTool		1	1	1	1

Personnel Staff

Supervisor: Leesfield Henry		Position: General manager	Dept 2000		
Dept	Name	Position	ID number	Phone	Fax
2210	Berton Marvin	Project manager	94732562	6453	7683
2310	Stylus John	Aerodynamics department manager	73654162	3026	7201
2320	Franklin Kenneth	Wind tunnel department manager	56352168	3043	7404
2330	Allgeyer Bill	Materials department manager	35274960	3045	7202
2340	Dart Derick	Structure department manager	53762811	5732	7572
2350	Emerson Tony	Mechanical department manager	47291027	5771	7601
2355	Newcastle Barry	Numerical design manager	27183648	6057	7511
2360	Goodman John	Stress department manager	58725619	6205	7655
2370	Etheridge John	Electrical department manager	49028612	9200	7120
2380	Bastion Erik	Furnishing & Quality manager	18367480	3215	7034
2390	Gravence Dick	Flight & ground facilities manager	16378490	6055	7083
3450	Williams Priscilla	Manufacture department manager	45728492	3305	7013

Supervisor: Berton Marvin		Position: Project manager	Dept 2210		
Dept	Name	Position	ID number	Phone	Fax
2210	Baker Jim	Project mechanical engineer	29754631	6456	7686
2210	Bush Gary	Project electrical engineer	54008567	6448	7678
2210	Carter Colin	Project structure engineer	70178549	6437	7671
2210	Chapman Ronald	Project flight test engineer	48673252	6444	7674
2210	Dexter Allen	Project certification engineer	63487329	6449	7679
2210	Ewers Gideon	Project engineer	85473527	6485	7117
2210	Fell Dan	Project engineer	38465628	6497	7123
2210	Folding Ernst	Project landing gears engineer	53262829	6450	7680
2210	Ford John	Project assistant manager	11992288	6452	7682
2210	Hart Ann	Project certification engineer	36748329	6446	7676
2210	Moon Roselin	Project marketing engineer	80945032	6493	7103
2210	Nixon Sam	Project ground test engineer	57868483	6451	7681
2210	Orange Sara	Project configuration engineer	86748201	6485	7695
2210	Petchey Amanda	Project engineer	48563511	6488	7128
2210	Porter Tom	Project maintainability engineer	54637291	6461	7991
2210	Powers Howard	Project aerodynamics engineer	51037253	6445	7675
2210	Ramsey Norman	Project flight line engineer	29482421	6476	7696
2210	Ross Marvin	Project production ass. manager	84727190	6459	7689
2210	Sherman Betty	Project interiors engineer	38476298	6458	7688
2210	Sommers Tony	Project engine engineer	39457589	6455	7685
2210	Truman Larry	Project manufacturing engineer	68392782	6442	7672

Supervisor: Stylus John		Position: Aerodynamics department manager	Dept 2310		
Dept	Name	Position	ID number	Phone	Fax
2311	Bogart Gary	Aerodynamics group leader	83712518	5432	7409
2314	Genkin Derick	Preliminary design group leader	50012846	5423	7402
2315	McCort Don	Stability & control group leader	48291203	5438	7406
2316	Lankford Steve	Simulation group leader	55732745	5439	7408
2317	Blackman Daniel	Heat transfer group leader	84593027	5427	7403
2319	Black David	Acoustics group leader	49857622	5422	7401

Project Management

20-Oct-98

<u>Ena</u>	<u>Discipline</u>	<u>Position</u>	<u>Surname</u>	<u>Name</u>	<u>Dept</u>	<u>Phone</u>	<u>Fax</u>
1	Project general	Project manager	Berton	Marvin	2210	6453	7683
2	Project general	Project design assist. manager	Ford	John	2210	6452	7682
3	Project general	Project production ass. manager	Ross	Marvin	2210	6459	7689
4	Project general	Project structure engineer	Carter	Cofin	2210	6437	7671
5	Project general	Project mechanical engineer	Baker	Jim	2210	6456	7686
6	Project general	Project electrical engineer	Bush	Gary	2210	6448	7678
7	Project general	Project engine engineer	Sommers	Tony	2210	6455	7685
8	Project general	Project landing gears engineer	Folding	Ernst	2210	6450	7680
9	Project general	Project manufacturing engineer	Truman	Larry	2210	6442	7672
10	Project general	Project interiors engineer	Sherman	Betty	2210	6458	7688
11	Project general	Project flight test engineer	Chapman	Ronald	2210	6444	7674
12	Project general	Project ground test engineer	Nixon	Sam	2210	6451	7681
13	Project general	Project aerodynamics engineer	Powers	Howard	2210	6445	7675
14	Project general	Project maintainability engineer	Porter	Tom	2210	6481	7991
15	Project general	Project certification engineer	Dexter	Allen	2210	6449	7679
16	Project general	Project configuration engineer	Orange	Sara	2210	6485	7695
17	Project general	Project flight line engineer	Ramsey	Norman	2210	6476	7696
18	Project general	Project marketing engineer	Moon	Roselin	2210	6493	7103
30	Preliminary design	Preliminary design engineer	Genkin	Derick	2314	5423	7402
31	Aerodynamics	Aerodynamics engineer	Bogart	Gary	2311	5432	7409
32	Wind tunnel	Wind tunnel engineer	Crack	Neville	2320	5425	7404
33	Stability & control	Stability & control engineer	McCort	Don	2315	5438	7406
34	Simulation	Simulation engineer	Lankford	Steve	2316	5439	7408
35	Heat transfer	Heat transfer engineer	Blackman	Daniel	2317	5427	7403
36	Acoustics	Acoustics engineer	Black	David	2319	5422	7401
37	Numerical design	Numerical design engineer	Foster	Mary	2355	9191	7111
40	Stress	Stress department manager	Goodman	John	2360	6205	7655
41	Nose section stress	Nose section stress leader	Beals	Gregory	2361	6211	7661
42	Cabin section stress	Cabin section stress leader	Elvis	Jan	2362	6202	7652
43	Aft cabin stress	Aft cabin stress leader	Fokker	Patrick	2363	6209	7659
44	Wing stress	Wing stress leader	Moynihan	Peter	2364	6207	7657
45	Empennage stress	Empennage stress leader	Fonda	Jane	2365	6204	7654
46	Damage tolerance	Damage tolerance engineer	Barnet	Mark	2366	6215	7665
47	Loads	Loads engineer	Turner	Tim	2367	6219	7669
48	Weight & balance	Weight and balance engineer	Sponder	Barry	2368	6225	7662
49	Aeroelastivity	Aeroelastivity engineer	Cox	Ervin	2369	6227	7667
50	Materials	Materials engineer	Foley	John	2331	5436	7407
61	Reliability	Reliability engineer	Ford	Betty	2383	3025	7048
62	Maintainability	Maintenance engineer	Rubin	Robert	2384	3014	7012
65	Ground test	Ground test engineer	Harrison	Carl	2392	3317	7008
66	Flight test	Flight test engineer	Gunter	Felix	2391	3279	7083
70	Manufacture	Manufacture department manager	Williams	Priscilla	3450	3305	7013
71	Mock-up	Mock-up manager	Pedersen	Daniel	3451	3324	7006
72	Prototype	Prototype manager	Hackworth	David	3452	3315	7021
73	Flight line	Flight line manager	Woodrock	Denis	3453	3395	7092
74	Tooling design & production	Tooling manager	Tennant	Bert	3454	3368	7091
75	Procurement	Procurement manager	Peterson	Dick	3456	3369	7069
80	Production engineering manager	Production engineering manager	Elton	Ted	3460	3350	7099
81	Production wing structure	Production wing str. engineer	Maidment	Paul	3461	3349	7098

Tuesday, October 20, 1998

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Preferred parts list

Part Number	Part Name	Width	Length	Height	Diameter	Thickness	Material	Weight
D38999/10W24P	Plug	0.000	0.000	0.000	0.000	0.000		0.05
D38999/12B22P	Plug	0.000	136.417	0.000	0.000	0.000		0.06
D38999/12F24P	Plug	0.000	0.000	0.000	0.000	0.000		0.06
D38999/12T36P	Plug	0.000	0.000	0.000	0.000	0.000		0.06
D38999/12W36P	Plug	0.000	0.000	0.000	0.000	0.000		0.06
D38999/14B30P	Plug	0.000	0.000	0.000	0.000	0.000		0.06
D38999/16B36P	Plug	0.000	99.095	0.000	0.000	0.000		0.06
D38999/16B40P	Plug	0.000	0.000	0.000	0.000	0.000		0.06
D38999/16D24P	Plug	0.000	0.000	0.000	0.000	0.000		0.07
D38999/16F28P	Plug	0.000	0.000	0.000	0.000	0.000		0.07
D38999/18B30P	Plug	0.000	0.000	0.000	0.000	0.000		0.07
D38999/18B36P	Plug	0.000	0.000	0.000	0.000	0.000		0.07
D38999/18D32P	Plug	0.000	0.000	0.000	0.000	0.000		0.07
D38999/20A46S	Receptacle	0.000	0.000	0.000	0.000	0.000		0.07
D38999/20B32P	Plug	0.000	0.000	0.000	0.000	0.000		0.07
D38999/20B36P	Plug	0.000	136.417	0.000	0.000	0.000		0.07
D38999/20B42P	Plug	0.000	0.000	0.000	0.000	0.000		0.07
D38999/20C44P	Plug	0.000	0.000	0.000	0.000	0.000		0.07
D38999/20F36P	Plug	0.000	0.000	0.000	0.000	0.000		0.08
D38999/20F36S	Receptacle	0.000	0.000	0.000	0.000	0.000		0.07
D38999/20H36P	Plug	0.000	0.000	0.000	0.000	0.000		0.08
D38999/20H36S	Receptacle	4.281	5.382	0.000	0.000			0.07
D38999/22B48P	Plug	0.000	0.000	0.000	0.000	0.000		0.08
D38999/22B52P	Plug	0.000	0.000	0.000	0.000	0.000		0.08
D38999/22F44P	Plug	0.000	0.000	0.000	0.000	0.000		0.08
D38999/22G56P	Plug	0.000	0.000	0.000	0.000	0.000		0.08
D38999/22H36P	Plug	0.000	0.000	0.000	0.000	0.000		0.08
D38999/22H36S	Receptacle	0.000	0.000	0.000	0.000	0.000		0.08
D38999/22W36P	Plug	0.000	0.000	0.000	0.000	0.000		0.08
D38999/22W36S	Receptacle	0.000	0.000	0.000	0.000	0.000		0.08
D38999/24B36P	Plug	0.000	0.000	0.000	0.000	0.000		0.08
D38999/24B40P	Plug	0.000	11.015	0.000		0.000		0.09
D38999/24B48P	Plug	0.000	0.000	0.000	0.000	0.000		0.09
D38999/24B56P	Plug	0.000	0.000	0.000	0.000	0.000		0.09
D38999/24H32P	Plug	0.000	0.000	0.000	0.000	0.000		0.09
D38999/24H32S	Receptacle	0.000	0.000	0.000	0.000	0.000		0.08
D38999/26D44P	Plug	0.000	0.000	0.000	0.000	0.000		0.09
D38999/26D54P	Plug	0.000	0.000	0.000	0.000	0.000		0.09
D38999/26F48P	Plug	0.000	0.000	0.000	0.000	0.000		0.09
D38999/28B56P	Plug	0.000	0.000	0.000	0.000	0.000		0.09
M39012/08F10P	Plug	0.000	0.000	0.000	0.000	0.000		0.04
M39012/08F12P	Plug	0.000	0.000	0.000	0.000	0.000		0.04
M39012/14A38P	Plug	0.000	0.000	0.000	0.000	0.000		0.04
M39012/14A38S	Receptacle	0.000	0.000	0.000	0.000	0.000		0.05
M39012/14B38P	Plug	0.000	0.000	0.000	0.000	0.000		0.05
M39012/14B38S	Receptacle	0.000	0.000	0.000	0.000	0.000		0.05
M39012/18B36P	Plug	0.000	0.000	0.000	0.000	0.000		0.05
M39012/18B36S	Receptacle	0.000	0.000	0.000	0.000	0.000		0.05
M39012/18B38P	Plug	0.000	0.000	0.000	0.000	0.000		0.06
M39012/18B38S	Receptacle	0.000	0.000	0.000	0.000	0.000		0.06
M39012/18K32P	Plug	0.000	0.000	0.000	0.000	0.000		0.06
M39012/24B38P	Plug	0.000	0.000	0.000	0.000	0.000		0.06
M39012/24B38S	Receptacle	0.000	0.000	0.000	0.000	0.000		0.07

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Preferred parts list

Part Number	Part Name	Width	Length	Height	Diameter	Thickness	Material	Weight
AE16170D06	Lipseal nut fitting 3/8"	0.000	0.000	0.000	0.375			0.02
AE16170D08	Lipseal nut fitting 1/2"	0.000	0.000	0.000	0.500			0.02
AE16170D10	Lipseal nut fitting 5/8"	0.000	0.000	0.000	0.625			0.03
AE16170E04	Lipseal nut fitting 1/4"	0.000	0.000	0.000	0.250			0.03
AE16170E06	Lipseal nut fitting 3/8"	0.000	0.000	0.000	0.375			0.03
AE16170E08	Lipseal nut fitting 1/2"	0.000	0.000	0.000	0.500			0.04
AF355787	Air filter		6.374		3.292			0.19
AN818D04	Nut - coupling 1/4"	0.000		0.000	0.250	0.000		0.02
AN818D06	Nut - coupling 3/8"	0.000	0.000	0.000				0.02
AN818D08	Nut - coupling 1/2"	0.000	4.893	0.000		0.000		0.02
AN818D10	Nut - coupling 5/8"	0.000	14.365	0.000		0.000		0.03
AN818D12	Nut - coupling 3/4"	0.000	0.000	0.000	0.000			0.03
AN818E04	Nut - coupling, 1/4"	0.000	0.000	0.000	0.000			0.02
AN818E10	Nut - coupling, 5/8"	0.000	0.000	0.000	0.000			0.03
AN818E12	Nut - coupling, 3/4"	0.000	0.000	0.000	0.000			0.03
AN818E16	Nut - coupling, 1"	0.000	0.000	0.000	0.000			0.04
AN832D04	Union - flared tube bulkhead 1/4"	0.000		0.000	0.000	0.000	Aluminum	0.02
AN832D06	Union - flared bulkhead fitting 3/8"	0.000		0.000	0.000	0.000	Aluminum	0.03
AN832D08	Union - flared tube bulkhead 1/2"	0.000		0.000	0.000	0.000	Aluminum	0.03
AN832D10	Union - flared tube bulkhead 5/8"	0.000		0.000	0.000	0.000	Aluminum	0.04
AN832D12	Union - flared tube bulkhead 3/4"	0.000	0.000	0.000	0.000	0.000		0.04
AN832D20	Union - flared tube bulkhead 1.25"	0.000		0.000	0.000	0.000	Aluminum	0.05
CL-5A-8	Clevis	0.000	8.365	0.000		0.000		0.09
CL126-3	Clevis	0.000	0.000	0.000	0.000			0.09
D11019D04	Union permaswage to male leapseal 1/4"	0.000		0.000	0.000	0.000	Aluminum	0.03
D11019D06	Union permaswage to male leapseal 3/8"	0.000		0.000	0.000	0.000	Aluminum	0.03
D11019D08	Union permaswage to male leapseal 1/2"	0.000		0.000	0.000	0.000	Aluminum	0.03
D11019D10	Union permaswage to male leapseal 5/8"	0.000		0.000	0.000	0.000	Aluminum	0.03
D11019J04	Union permaswage to male leapseal 1/4"	0.000		0.000	0.000	0.000	Titanium	0.03
D11019J06	Union permaswage to male leapseal 3/8"	0.000		0.000	0.000	0.000	Titanium	0.03
D11019J08	Union permaswage to male leapseal 1/2"	0.000		0.000	0.000	0.000	Titanium	0.03
D11056A040404	Tee Female, Lipseal on run perma.	0.000	0.000	0.000	0.000			0.03
D11056A060604	Tee Female, Lipseal on run perma.	0.000	0.000	0.000	0.000			0.04
D11056A060606	Tee Female, Lipseal on run perma.	0.000	0.000	0.000	0.000			0.04
FD-108-02/D	Bulkhead fitting 1/8"	0.000		0.000	0.000	0.000	Aluminum	0.01
MS19287-3	Cable pad	0.000	0.000	0.000	0.000			0.04
MS20219-04	Pulley	0.438	3.866	3.866	3.866			0.28
MS20219-05	Pulley	0.438	5.125	5.125	5.125			0.37
MS20219-08	Pulley	0.438	8.123	8.123	8.123			0.46
MS20219-11	Pulley	0.438	11.815	11.815	11.815			0.57
MS20219-12	Pulley	0.438	11.815	11.815	11.815			0.57
MS21547-32	Restrictor	0.285			1.783			0.10
MS23584B-8	Check valve	0.653			0.491			0.18
MS26593-32	Orifice	0.196			1.755			0.02
MS28521-32	Flapper valve	0.428			1.896			0.04
MS28889-2	Charging valve	2.395	3.193	1.953				0.12
MS29251-32	Flapper valve	0.428			1.896			0.04
MS29521-32	Flapper check valve	0.372			1.905			0.62
MS29521-40	Flapper check valve	0.293			2.174			0.07
MS29531-32	Flapper check valve	0.372			1.894			0.06
MS33688E04	Cap fitting 0.25"	0.000	0.000	0.000	0.000			0.04
MS33798D04	Cap fitting 0.25"	0.000	0.000	0.000	0.000			0.03
MS75923-4	Strap	0.000	7.482	0.000		0.000		0.43

Process Standards

Number	Subject	Title
PS3010	Non-Destructive Test	Radiographic Inspection
PS3013	Bonding	Adhesive bonding to Graphite-Epoxy Components
PS3014	Protective Finish	Epoxy Primer Application for Structure
PS3018	Machining	Machining of Titanium Alloys
PS3027	Composite Materials	Glass Epoxy Laminates in Sandwich Structure
PS3029	Electrical Connectors	Electrical Connectors Attachment
PS3040	Electrical Connectors	Electrical Connectors Fabrication
PS3042	Fasteners	Lock-Bolt Installation
PS3046	Fluids	Pneumatic System Installation
PS3050	Fluids	Flare Fittings Installation
PS3056	Non-Destructive Test	Tubing Inspection
PS3068	Wiring	Identification and Marking of Wire Bundles
PS3098	Heat Treatment	Heat Treatment Process
PS3109	Non-Destructive Test	Magnetic Particle Inspection
PS3112	Non-Destructive Test	Adhesive Bonded Structure Inspection
PS3114	Protective Finish	Integral Fuel Tank Coating
PS3116	Metal Forming	Metal Forming and Fabrication
PS3126	Composite Materials	Wet Layup Plies
PS3128	Metal Forming	Cold Working in Titanium Alloys
PS3131	Lubrication	Lubricants Application Process
PS3135	Sealing	Fairing Sealing
PS3141	Fasteners	Blind Fasteners Installation
PS3144	Fasteners	Composite Structure by Fasteners
PS3147	Fluids	Hydraulic System Installation
PS3153	Shims	Laminated Shims Installation
PS3156	Bearing	Bearing Installation
PS3180	Fluids	Landing Gear Installation
PS3196	Protective Finish	Polyurethane Coating
PS3210	Machining	Cleaning and Deburring of Machining Parts
PS3213	Fluids	Fuel System Wig-O-Flex Coupling Installation
PS3239	Machining	Machining of Aluminum Alloys
PS3243	Fasteners	Solid Rivets Installation
PS3246	Cleaning	Vapor Degreasing
PS3251	Marking	Marking of Sheet Parts
PS3254	Protective Finish	Anti-Static Coating
PS3268	Metal Forming	Cold Working in Steel Alloys
PS3272	Marking	Marking of Tube Assembly
PS3277	Shims	Solid Filters Installation
PS3283	Bonding	Metal-to-Metal Bonding
PS3299	Fluids	Fuel System Installation
PS3309	Fluids	ECS System Installation
PS3316	Fluids	Anemometry System Installation
PS3322	Fluids	Tube-to-Fitting Installation
PS3328	Composite Materials	Reinforced Composite Materials
PS3329	Fluids	De-Icing and Anti Icing System Installation
PS3330	Seals	O-Rings and Seals Installation
PS3336	Heat Treatment	Heat Treatment of Steel Alloys
PS3337	Sealing	Composite Materials Sealing
PS3341	Fluids	Flexible hoses Installation
PS3344	Chemical Treatment	Anodizing of Steel Alloys

Procurement invoices report

Invoice	ProEng	Name	Position	Clark name	Position	Supplier	SupplyDate
40645	75	Peterson Dick	Procurement manager	Ramsey Gary	Procurement clerk	Connectors supply	27-Jul-97
40646	75	Peterson Dick	Procurement manager	Clemente Monica	Procurement clerk	Electrocables	27-Jul-97
40647	75	Peterson Dick	Procurement manager	Ricci Frank	Procurement clerk	Electrolimit	27-Jul-97
40648	75	Peterson Dick	Procurement manager	Simcoe Leonard	Procurement clerk	MasterTool	27-Jul-97
40649	75	Peterson Dick	Procurement manager	Dovedale Mary	Procurement clerk	Mill Computer	27-Jul-97
40650	75	Peterson Dick	Procurement manager	Simcoe Leonard	Procurement clerk	Milling Production	27-Jul-97
40651	75	Peterson Dick	Procurement manager	Dovedale Mary	Procurement clerk	Press Computer	27-Jul-97
40652	75	Peterson Dick	Procurement manager	Ricci Frank	Procurement clerk	Press Production	27-Jul-97
40653	75	Peterson Dick	Procurement manager	Dovedale Mary	Procurement clerk	Press Vision	27-Jul-97
40654	75	Peterson Dick	Procurement manager	Ramsey Gary	Procurement clerk	Tubex	27-Jul-97
40655	75	Peterson Dick	Procurement manager	Simcoe Leonard	Procurement clerk	Tuboflex	27-Jul-97
40656	75	Peterson Dick	Procurement manager	Ricci Frank	Procurement clerk	World express	27-Jul-97
40657	75	Peterson Dick	Procurement manager	Ramsey Gary	Procurement clerk	Connectors supply	28-Jul-97
40658	75	Peterson Dick	Procurement manager	Clemente Monica	Procurement clerk	Crank & Rod	28-Jul-97
40659	75	Peterson Dick	Procurement manager	Clemente Monica	Procurement clerk	Electrocables	28-Jul-97
40660	75	Peterson Dick	Procurement manager	Ricci Frank	Procurement clerk	FluidFit supply	28-Jul-97
40661	75	Peterson Dick	Procurement manager	Simcoe Leonard	Procurement clerk	Hydro power	28-Jul-97
40662	75	Peterson Dick	Procurement manager	Simcoe Leonard	Procurement clerk	MasterTool	28-Jul-97
40663	75	Peterson Dick	Procurement manager	Dovedale Mary	Procurement clerk	Mill & Tum	28-Jul-97
40664	75	Peterson Dick	Procurement manager	Dovedale Mary	Procurement clerk	Mill Vision	28-Jul-97
40665	75	Peterson Dick	Procurement manager	Ramsey Gary	Procurement clerk	Network	28-Jul-97
40666	75	Peterson Dick	Procurement manager	Ramsey Gary	Procurement clerk	Press Vision	28-Jul-97
40667	75	Peterson Dick	Procurement manager	Ramsey Gary	Procurement clerk	Tubex	28-Jul-97
40668	75	Peterson Dick	Procurement manager	Ricci Frank	Procurement clerk	Connectors supply	29-Jul-97
40669	75	Peterson Dick	Procurement manager	Ramsey Gary	Procurement clerk	Electrocables	29-Jul-97
40670	75	Peterson Dick	Procurement manager	Clemente Monica	Procurement clerk	General Electric	29-Jul-97
40671	75	Peterson Dick	Procurement manager	Ricci Frank	Procurement clerk	MasterTool	29-Jul-97
40672	75	Peterson Dick	Procurement manager	Simcoe Leonard	Procurement clerk	Mill Computer	29-Jul-97
40673	75	Peterson Dick	Procurement manager	Dovedale Mary	Procurement clerk	Press Production	29-Jul-97
40674	75	Peterson Dick	Procurement manager	Dovedale Mary	Procurement clerk	Press Vision	29-Jul-97
40675	75	Peterson Dick	Procurement manager	Ricci Frank	Procurement clerk	Servocomputer	29-Jul-97
40676	75	Peterson Dick	Procurement manager	Dovedale Mary	Procurement clerk	Tubex	29-Jul-97
40677	75	Peterson Dick	Procurement manager	Dovedale Mary	Procurement clerk	Wagner	29-Jul-97
40678	75	Peterson Dick	Procurement manager	Ramsey Gary	Procurement clerk	Connectors supply	30-Jul-97
40679	75	Peterson Dick	Procurement manager	Simcoe Leonard	Procurement clerk	Control appliance	30-Jul-97
40680	75	Peterson Dick	Procurement manager	Ramsey Gary	Procurement clerk	Electro supply	30-Jul-97
40681	75	Peterson Dick	Procurement manager	Ramsey Gary	Procurement clerk	Electrocables	30-Jul-97
40682	75	Peterson Dick	Procurement manager	Clemente Monica	Procurement clerk	Electromovement	30-Jul-97
40683	75	Peterson Dick	Procurement manager	Clemente Monica	Procurement clerk	MasterTool	30-Jul-97
40684	75	Peterson Dick	Procurement manager	Ricci Frank	Procurement clerk	Mill Computer	30-Jul-97
40685	75	Peterson Dick	Procurement manager	Dovedale Mary	Procurement clerk	Mill Vision	30-Jul-97
40686	75	Peterson Dick	Procurement manager	Simcoe Leonard	Procurement clerk	Milling Production	30-Jul-97
40687	75	Peterson Dick	Procurement manager	Dovedale Mary	Procurement clerk	Press Production	30-Jul-97
40688	75	Peterson Dick	Procurement manager	Ricci Frank	Procurement clerk	Press Vision	30-Jul-97
40689	75	Peterson Dick	Procurement manager	Dovedale Mary	Procurement clerk	Tubex	30-Jul-97
40690	75	Peterson Dick	Procurement manager	Dovedale Mary	Procurement clerk	Connectors supply	01-Aug-97
40691	75	Peterson Dick	Procurement manager	Ramsey Gary	Procurement clerk	Electro supply	01-Aug-97
40692	75	Peterson Dick	Procurement manager	Simcoe Leonard	Procurement clerk	Electrocables	01-Aug-97
40693	75	Peterson Dick	Procurement manager	Ricci Frank	Procurement clerk	Hydro power	01-Aug-97
40694	75	Peterson Dick	Procurement manager	Clemente Monica	Procurement clerk	Interprise	01-Aug-97
40695	75	Peterson Dick	Procurement manager	Clemente Monica	Procurement clerk	Majors valves	01-Aug-97
40696	75	Peterson Dick	Procurement manager	Ricci Frank	Procurement clerk	MasterTool	01-Aug-97
40697	75	Peterson Dick	Procurement manager	Simcoe Leonard	Procurement clerk	Tubex	01-Aug-97
40698	75	Peterson Dick	Procurement manager	Dovedale Mary	Procurement clerk	Mill & Tum	01-Aug-97
40699	75	Peterson Dick	Procurement manager	Simcoe Leonard	Procurement clerk	Mill & Tum	01-Aug-97

DATE = 13 FEB 98

Production route card

Part Number	Part Name	Qty	Wgt lb	Length ft	Height in	Material	MRD	BLDG	STAGG	WLCG	Inst Part Number	Item	Operation	Time, Start hours date	Finish date
3408F-05-38	Insert check valve	VP	0.4		1.543	F016					55.84 645.63 69.08	DPM6293000-501	1Clean P/N 3408F-05-38	0.72	27-Jul-98 14-Jan-99
3408F-05-38	Insert check valve	VP	0.4		1.543	F016					55.84 645.63 69.08	DPM6293000-501	2Trim and adjust P/N 3408F-05-38	0.38	27-Jul-98 14-Jan-99
3408F-05-38	Insert check valve	VP	0.4		1.543	F016					55.84 645.63 69.08	DPM6293000-502	1Clean P/N 3408F-05-38	0.72	27-Jul-98 14-Jan-99
3408F-05-38	Insert check valve	VP	0.4		1.543	F016					55.84 645.63 69.08	DPM6293000-502	2Trim and adjust P/N 3408F-05-38	0.38	27-Jul-98 14-Jan-99
4656-10-D8-02	Hydraulic fuse	LR	3.3	6.8	5.3	H737					14.78 191.09 21.21	DPM6191500-501	1Install part MS25252-04 End male fitting 0.25" H737X1 in Jlg	0.38	18-Jul-98 27-Jul-98
4656-10-D8-02	Hydraulic fuse	LR	3.3	6.8	5.3	H737					14.78 191.09 21.21	DPM6191500-501	2Clean P/N 4656-10-D8-02	0.64	18-Jul-98 27-Jul-98
4656-10-D8-02	Hydraulic fuse	LR	3.3	6.8	5.3	H738					14.19 184.61 14.28	DPM6191500-501	1Install part MS25252-04 End male fitting 0.25" H737X1 in Jlg	0.38	18-Jul-98 27-Jul-98
4656-10-D8-02	Hydraulic fuse	LR	3.3	6.8	5.3	H738					14.19 184.61 14.28	DPM6191500-501	2Clean P/N 4656-10-D8-02	0.64	18-Jul-98 27-Jul-98
4656-10-H7-03	Hydraulic fuse	LR	4.3	6.3	5.4	H709					18.05 171.46 18.21	DPM6191500-501	1Install part MS25252-04 End male fitting 0.25" H709X1 in Jlg	2.33	27-Feb-98 07-Mar-98
4656-10-H7-03	Hydraulic fuse	LR	4.3	6.3	5.4	H709					18.05 171.46 18.21	DPM6191500-501	2Clean P/N 4656-10-H7-03	0.78	27-Feb-98 07-Mar-98
4656-10-H7-03	Hydraulic fuse	LR	4.3	6.3	5.4	H710					21.57 171.46 11.57	DPM6191500-501	1Install part MS25252-04 End male fitting 0.25" H709X1 in Jlg	2.33	27-Feb-98 07-Mar-98
4656-10-H7-03	Hydraulic fuse	LR	4.3	6.3	5.4	H710					21.57 171.46 11.57	DPM6191500-501	2Clean P/N 4656-10-H7-03	0.78	27-Feb-98 07-Mar-98
47765-1	Drain valve static	VP	2.4	4.4	4.0	J089					2.95 317.87	2.01 DPM6501000-501	1Clean P/N 47765-1	0.38	23-Jan-98 04-Feb-98
47765-1	Drain valve static	VP	2.4	4.4	4.0	J089					2.95 317.87	2.01 DPM6501000-501	2Trim and adjust P/N 47765-1	0.44	23-Jan-98 04-Feb-98
47765-1	Drain valve static	VP	2.4	4.4	4.0	J090					2.95 317.87	2.01 DPM6501000-502	1Clean P/N 47765-1	0.38	23-Jan-98 04-Feb-98
47765-1	Drain valve static	VP	2.4	4.4	4.0	J090					2.95 317.87	2.01 DPM6501000-502	2Trim and adjust P/N 47765-1	0.44	23-Jan-98 04-Feb-98
47765-1	Drain valve static	VP	2.4	4.4	4.0	J091					2.95 317.87	2.01 DPM6501000-501	1Clean P/N 47765-1	0.38	23-Jan-98 04-Feb-98
47765-1	Drain valve static	VP	2.4	4.4	4.0	J091					2.95 317.87	2.01 DPM6501000-501	2Trim and adjust P/N 47765-1	0.44	23-Jan-98 04-Feb-98

0108

Reports list

Report Number	Report Name	T	Sh	Form	Rev	Designer name	Dept	Date	Update	WBS
DPM001R001	A/c general definition	RD	89	A4	C	Ford John	2210	09-Apr-97	04-Jun-98	10000
DPM001R002	Statement of work (SOW) report	RD	98	A4	A	Ford John	2210	01-Jan-97	12-May-98	10000
DPM001R003	Work breakdown structure (WBS) rep	RD	95	A4	B	Orange Sara	2210	13-May-97	29-Mar-98	1200
DPM030R001	Preliminary design evaluation report	RD	86	A4	D	Genkin Derick	2314	24-Jul-97	10-Jan-98	22100
DPM031R001	Aerodynamic performance substantiation	RD	50	A4	A	Bogart Gary	2311	08-Aug-97	24-Feb-98	22200
DPM032R001	Wind tunnel evaluation report	RD	46	A4	B	Crack Neville	2320	22-Feb-97	10-Jul-98	31100
DPM033R001	Stability & control evaluation report	RD	81	A4	B	McCort Don	2315	11-Jan-97	18-May-98	22800
DPM034R001	Simulation of a/c & substantiation	RD	32	A4	C	Lankford Steve	2316	27-Jun-97	25-Mar-98	22810
DPM035R001	Heat transfer substantiation	RD	89	A4	D	Blackman Daniel	2317	13-Sep-97	14-Jun-98	22280
DPM036R001	Acoustics substantiation	RD	66	A4	C	Black David	2319	15-Oct-97	23-Apr-98	11800
DPM037R001	CAD/CAM support substantiation	RD	83	A4	A	Foster Mary	2355	21-Mar-97	19-Feb-98	22900
DPM040R001	Stress evaluation & substantiation	RD	42	A4	B	Goodman John	2361	26-Apr-97	23-Jun-98	22300
DPM041R001	Fuselage nose section stress substantiation	RD	118	A4	A	Beals Gregory	2361	25-Mar-97	19-May-98	22310
DPM042R001	Fuselage cabin section stress substantiation	RD	141	A4	B	Elvis Jan	2362	14-Jun-97	13-Jun-98	22320
DPM043R001	Fuselage aft section stress substantiation	RD	124	A4	B	Folcker Patrick	2363	03-Dec-97	14-Feb-98	22320
DPM044R001	Wing stress substantiation	RD	137	A4	A	Moynihan Peter	2364	19-Oct-97	29-Jan-98	22340
DPM045R001	Empennage stress substantiation	RD	103	A4	C	Fonda Jane	2365	23-Jun-97	25-May-98	22350
DPM046R001	Fatigue substantiation	RD	84	A4	C	Barnet Mark	2366	09-Oct-97	25-Apr-98	22400
DPM046R002	Damage tolerance substantiation	RD	91	A4	D	Barnet Mark	2366	13-Jun-97	19-Jun-98	22500
DPM047R001	Loads substantiation	RD	77	A4	A	Tuner Tim	2367	14-Nov-97	23-Jul-98	22270
DPM048R001	Weight & balance substantiation	RD	37	A4	A	Sponder Barry	2368	29-Aug-97	14-Mar-98	22700
DPM049R001	Aeroelasticity substantiation	RD	65	A4	B	Cox Ervin	2369	25-May-97	14-May-98	22630
DPM050R001	Materials substantiation	RD	79	A4	B	Foley John	2331	25-Apr-97	16-May-98	42500
DPM050R002	Corrosion prevention	RD	92	A4	A	Foley John	2331	19-Jun-97	09-Jun-98	42500
DPM050R003	Aircraft sealing	RD	74	A4	C	Foley John	2331	23-Jul-97	13-Apr-98	42500
DPM061R001	Reliability substantiation	RD	72	A4	D	Ford Betty	2383	10-Oct-97	23-Apr-98	2400
DPM061R002	Preferred Parts (Mechanical) and substantiation	RD	214	A4	C	Ford Betty	2383	09-Oct-97	23-Apr-98	2400
DPM061R003	Preferred Parts (Electrical) and substantiation	RD	352	A4	E	Ford Betty	2383	16-Jun-97	02-Mar-98	2400
DPM061R004	Failure parts investigation	RD	61	A4	B	Ford Betty	2383	14-Aug-98	23-Nov-98	2400
DPM062R001	Maintenance substantiation	RD	55	A4	C	Rubin Robert	2384	14-Aug-97	18-Jul-98	2500
DPM062R002	Maintenance & accessibility substantiation	RD	255	A4	C	Rubin Robert	2384	23-May-98	11-Nov-98	2500
DPM062R003	Line Replacement Units (LRU) substantiation	RD	137	A4	C	Rubin Robert	2384	23-Jun-98	30-Oct-98	2500
DPM065R001	Ground test evaluation and substantiation	RD	31	A4	B	Harrison Carl	2392	21-Oct-97	27-Oct-98	31000
DPM065R002	Ground test units instl requirements	RD	38	A4	B	Harrison Carl	2392	19-Sep-97	13-Sep-98	31000
DPM066R001	Flight test evaluation and substantiation	RD	35	A4	C	Gunter Felix	2391	30-Aug-97	25-Nov-98	32000
DPM066R002	Flight test units instl requirements	RD	42	A4	C	Gunter Felix	2391	18-Dec-97	31-Aug-98	32000
DPM070R001	Production evaluation & substantiation	RD	59	A4	A	Williams Priscilla	3451	16-May-97	15-Jun-98	34000
DPM071R001	Mock-up evaluation & substantiation	RD	76	A4	B	Pedersen Daniel	3451	09-Jun-97	17-Apr-98	34200
DPM071R002	Mock-up production toolings & jigs	RD	52	A4	C	Pedersen Daniel	3451	13-Apr-97	25-May-98	34200
DPM072R001	Serial production evaluation & substantiation	RD	74	A4	A	Hackworth David	3452	08-Aug-97	13-Jul-98	34200
DPM072R002	Serial production toolings & jigs	RD	86	A4	C	Hackworth David	3452	18-Sep-97	26-Jul-98	34200
DPM073R001	Flight line	RD	34	A4	C	Woodrock Denis	3453	15-Jun-97	23-Mar-98	33500
DPM074R001	Toolings & jigs	RD	47	A4	A	Tennant Bert	3454	17-Apr-97	14-Jun-98	34200
DPM080R001	AMO (Advanced Material Order)	RD	21	A4	B	Elton Ted	3461	19-Apr-97	25-Oct-97	37002
DPM080R002	Manufacturing Technology & substantiation	RD	36	A4	C	Elton Ted	3461	13-Jul-97	20-Dec-97	37002
DPM080R003	Production cost Design-to-Cost evaluation	RD	179	A4	D	Elton Ted	3461	19-Apr-97	29-Dec-98	37002
DPM080R004	Production cost DFMA evaluation	RD	165	A4	C	Elton Ted	3461	19-Apr-97	13-Jul-98	37002
DPM080R005	Long Lead Items (LLI) substantiation	RD	22	A4	B	Elton Ted	3461	19-Apr-97	07-Aug-97	37002
DPM100R001	General design substantiation	RD	99	A4	A	Dart Derick	2341	11-Oct-97	13-Jun-98	11000
DPM101R001	A/c parts clearance report	RD	68	A4	D	Dallas Alex	2341	13-Aug-97	19-Mar-98	11000
DPM101R002	Interchangeability substantiation	RD	55	A4	D	Dallas Alex	2341	26-Jul-97	23-Jun-98	11000
DPM101R003	Structure drainage substantiation	RD	58	A4	B	Dallas Alex	2341	14-Feb-97	09-Apr-98	11000
DPM101R004	Emergency exit & provision substantiation	RD	55	A4	B	Dallas Alex	2341	05-Oct-97	01-Jan-98	11000
DPM101R005	Access doors provision & substantiation	RD	64	A4	B	Dallas Alex	2341	15-Nov-97	03-Mar-98	12122

05-Jul-98

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Suppliers list

Company	Country	Address	Phone	Fax
Aerodata	USA	New York	14006291	22919571
Aerofridge	USA	Minneapolis	44133160	53046440
Aerosewage	USA	Pittsburg	73933509	82846789
Aerowater	USA	Missoula	20602031	29515311
Air instrument	Israel	Natania	75201135	84114415
Air Transport	England	Dover	47531103	56444383
Aircondition	USA	Houston	35522962	44436242
Assembly	Israel	Ashdod	36475652	32523153
Avia Computer	France	Rue Luis 235, Lion	48859603	47627282
Bend Scope	Canada	Toronto	64635271	26364645
Bundles	England	Manchester	32535527	33774859
Charnel	Canada	Kingston	24907095	33820375
Compo Interior	Sweden	Getburg	44027450	52940730
Composite	USA	Las Vegas	34563527	34847596
Compotext	USA	Miami	82439205	91352485
Concord	Italy	Milano	54356352	53543421
Conditioner	Sweden	Getburg	64534256	67487899
Connectors supply	USA	Barstow	63472891	38546281
Control appliance	Germany	Bremen	36412166	45325446
Control mechanism	Spain	Malaga	77240337	86153617
Crank & Rod	Italy	Turino	45512317	54425597
Data instrument	England	Hastings	64119327	73032607
Digitime	Germany	Franfurt	62413437	71326717
Dowry Rotol	France	Rue Monterey 45, Bordeaux	10797105	19710385
Drainage	Germany	Hannover	62219122	71132402
Electro supply	USA	Bakesfield	36472981	38456173
Electrocables	Italy	Napoly	35400551	44313831
Electrocompact	Italy	Milan	54130266	63043546
Electrocontrol	England	Hull	64111043	73024323
Electrogoods	Canada	Montreal	32563521	37464758
Electrolimit	Canada	Calgary	75131324	84044604
Electromovement	USA	San Francisco	73330437	82243717
Electropower	Canada	Hamilton	39787336	48700616
Fibronix	France	Rue Marie 13, Magino	85008327	93921607
Fireman	Canada	Rue Monterey 24, Montreal	66249390	75162670
Fisher	USA	Kansas City	38623274	47536554
Flexpipes	Spain	Toledo	76365245	83651683
FluidFit supply	USA	Westmorland	23643629	26367283
Fuel products	USA	Lincoln	35513600	44426880
Garrett	USA	Stockton	31329418	40242698
General Electric	USA	Newport	41409393	50322673
Generation	USA	Buffolo	55138470	64051750
Glare	Germany	Potsdam	31302427	40215707
Glassmaker	Spain	Madrid	37475578	37546645
Goodyear	USA	Louiseville	52437660	61350940
Gordon Mechanism	USA	Mansfield	34511528	43424808
Hydro computer	USA	Detroit	52529524	61442804
Hydro power	Germany	Dresden	33029427	41942707
Hydro products	Germany	Berlin	34130554	43043834
Hydro valve	Germany	Colon	33300424	42213704
Hydrocontrol	Israel	Ashdod	52409424	61322704
Hydrovision	USA	Boston	34242227	43155507
Interior	Italy	Verona	57678392	57909483
Internet	England	Birmingham	30889991	39603271

Report Number: DPM101R0C Report Name: Aircraft Systems Survivability substantiation
Name: Pleasure Tom Position: Integration engineer
Last revision: D Date: 30-Aug-88
Dept: 2341 Phone: 3051

Survivability and EMC Request for Minimum Distance between parts

M/RD	Part Number	Part Name	System	Substg	Substg	M/RD	Part Number	Part Name	System	Substg	Substg	Surv1 Descr	Surv2 Descr	Survive	Survive
				em	stems					stem	stem	code	code	system	system
	116	Bay Name: Flight controls under flight control LHS													
C-129	DPM4210010-501	Push - pull rod	Mecha	Flight	Aleron	G129	DPM6311210-501	NLG wheel, 18 x 4.4	Fluid	Landing gear	NLG	CP Primary Flight	Critical LG Landing Gear	0.27	0.27
C-129	DPM4210010-501	Push - pull rod	Mecha	Flight	Aleron	G130	DPM6311210-502	NLG wheel, 18 x 4.4	Fluid	Landing gear	NLG	CP Primary Flight	Critical LG Landing Gear	0.27	0.27
C-129	DPM4210010-501	Push - pull rod	Mecha	Flight	Aleron	G131	DPM6311220-001	Nose tire, 18 x 4.4	Fluid	Landing gear	NLG	CP Primary Flight	Critical LG Landing Gear	0.27	0.27
C-129	DPM4210010-501	Push - pull rod	Mecha	Flight	Aleron	G132	DPM6311220-001	Nose tire, 18 x 4.4	Fluid	Landing gear	NLG	CP Primary Flight	Critical LG Landing Gear	0.27	0.27
C-129	DPM4210010-501	Push - pull rod	Mecha	Flight	Aleron	HBF03-08	D11019J08	Union	Fluid	Hydraulic	Power	CP Primary Flight	Critical H1 Hydraulic Power	0.42	0.42
C-129	DPM4210010-501	Push - pull rod	Mecha	Flight	Aleron	HBF04-08	D11019D08	Union	Fluid	Hydraulic	Power	CP Primary Flight	Critical H1 Hydraulic Power	0.42	0.42
C-129	DPM4210010-501	Push - pull rod	Mecha	Flight	Aleron	HBF71-04	D11019J04	Union	Fluid	Hydraulic	L/G up	CP Primary Flight	Critical LG Landing Gear	0.27	0.27
C-129	DPM4210010-501	Push - pull rod	Mecha	Flight	Aleron	HBF72-04	D11019J04	Union	Fluid	Hydraulic	L/G down	CP Primary Flight	Critical LG Landing Gear	0.27	0.27
C-129	DPM4210010-501	Push - pull rod	Mecha	Flight	Aleron	HBF91-04	D11019J04	Union	Fluid	Hydraulic	Brakes	CP Primary Flight	Critical LG Landing Gear	0.27	0.27
C-129	DPM4210010-501	Push - pull rod	Mecha	Flight	Aleron	HBF92-04	D11019J04	Union	Fluid	Hydraulic	Brakes	CP Primary Flight	Critical LG Landing Gear	0.27	0.27
C-129	DPM4210010-501	Push - pull rod	Mecha	Flight	Aleron	HLGD0704	DPM6181114-501	Tube easy	Fluid	Hydraulic	L/G down	CP Primary Flight	Critical LG Landing Gear	0.27	0.27
C-129	DPM4210010-501	Push - pull rod	Mecha	Flight	Aleron	HLGU0704	DPM6181113-501	Tube easy	Fluid	Hydraulic	L/G up	CP Primary Flight	Critical LG Landing Gear	0.27	0.27
C-129	DPM4210010-501	Push - pull rod	Mecha	Flight	Aleron	HP1P1208	DPM6111123-501	Tube easy	Fluid	Hydraulic	Power	CP Primary Flight	Critical H1 Hydraulic Power	0.42	0.42
C-129	DPM4210010-501	Push - pull rod	Mecha	Flight	Aleron	HP1R1208	DPM6111124-501	Tube easy	Fluid	Hydraulic	Power	CP Primary Flight	Critical H1 Hydraulic Power	0.42	0.42
C-129	DPM4210010-501	Push - pull rod	Mecha	Flight	Aleron	HPBL0104	DPM6172101-501	Tube easy	Fluid	Hydraulic	Brakes	CP Primary Flight	Critical LG Landing Gear	0.27	0.27
C-129	DPM4210010-501	Push - pull rod	Mecha	Flight	Aleron	HPBL0304	DPM6172105-501	Tube easy	Fluid	Hydraulic	Brakes	CP Primary Flight	Critical LG Landing Gear	0.27	0.27
C-129	DPM4210010-501	Push - pull rod	Mecha	Flight	Aleron	HPBR0304	DPM6172108-501	Tube easy	Fluid	Hydraulic	Brakes	CP Primary Flight	Critical LG Landing Gear	0.27	0.27

Survivability and EMC minimum separation distance requirement

Part 1 Code	Description	Survivability System	Part 2 Code	Description	Survivability System	Distance	Remarks
AD	Air Data System	Critical	AH	Attitude Heading Reference System	Critical	1.31	Separation - 0.25 inch, 1 inch from moving parts
AD	Air Data System	Critical	AP	APU System	Essential	1.35	Separation - 0.25 inch, 1 inch from moving parts
AD	Air Data System	Critical	AS	Anti-Skid	Essential	1.25	Separation - 0.25 inch, 1 inch from moving parts
AD	Air Data System	Critical	AT	Attitude	Critical	1.26	Separation - 0.25 inch, 1 inch from moving parts
AD	Air Data System	Critical	CP	Primary Flight Control System	Critical	1.27	Separation - 0.25 inch, 1 inch from moving parts
AD	Air Data System	Critical	CS	Secondary Flight Control System	Essential	1.34	Separation - 0.25 inch, 1 inch from moving parts
AD	Air Data System	Critical	EF	Electrical Flight Instruments System	Critical	1.36	Separation - 0.25 inch, 1 inch from moving parts
AD	Air Data System	Critical	EI	EICAS	Critical	1.43	Separation - 0.25 inch, 1 inch from moving parts
AD	Air Data System	Critical	FE	Fire Protection/Extinguish		1.28	Separation - 0.25 inch, 1 inch from moving parts
AD	Air Data System	Critical	FF	Fuel Feed	Critical	1.46	Separation - 0.25 inch, 1 inch from moving parts
AD	Air Data System	Critical	FM	Fuel Quantity Measurement	Critical	1.44	Separation - 0.25 inch, 1 inch from moving parts
AD	Air Data System	Critical	FS	Fuel System		1.50	Separation - 0.25 inch, 1 inch from moving parts
AD	Air Data System	Critical	H1	Hydraulic Power System 1	Critical	1.29	Separation - 0.25 inch, 1 inch from moving parts
AD	Air Data System	Critical	H2	Hydraulic Power System 2	Critical	1.41	Separation - 0.25 inch, 1 inch from moving parts
AD	Air Data System	Critical	HS	Hydraulics Utility System		1.39	Separation - 0.25 inch, 1 inch from moving parts
AD	Air Data System	Critical	LG	Landing Gear		1.30	Separation - 0.25 inch, 1 inch from moving parts
AD	Air Data System	Critical	NA	Navigation System	Essential	1.49	Separation - 0.25 inch, 1 inch from moving parts
AD	Air Data System	Critical	NW	Nose Wheel Steering	Critical	1.45	Separation - 0.25 inch, 1 inch from moving parts
AD	Air Data System	Critical	P1	Engine Left Power Generating	Critical	1.52	Separation - 0.25 inch, 1 inch from moving parts
AD	Air Data System	Critical	P2	Engine Right Power Generating	Critical	1.57	Separation - 0.25 inch, 1 inch from moving parts
AD	Air Data System	Critical	PC	ECS Pressurization Control	Essential	1.60	Separation - 0.25 inch, 1 inch from moving parts
AD	Air Data System	Critical	PS	Power Plant System	Essential	1.53	Separation - 0.25 inch, 1 inch from moving parts
AD	Air Data System	Critical	TR	Thrust Reverser	Essential	1.48	Separation - 0.25 inch, 1 inch from moving parts
AD	Air Data System	Critical	W1	Wire - Source of Interference Circuits	Critical	1.55	Separation - 0.25 inch, 1 inch from moving parts
AD	Air Data System	Critical	W2	Wire - Passive Circuits	Essential	1.58	Separation - 0.25 inch, 1 inch from moving parts
AD	Air Data System	Critical	W3	Wire - Sensitive or Susceptible Circuits		1.61	Separation - 0.25 inch, 1 inch from moving parts
AD	Air Data System	Critical	WA	Wire APU Electrical Power		1.66	Separation - 0.25 inch, 1 inch from moving parts
AD	Air Data System	Critical	WL	Wire Left Engine Electrical Power	Critical	1.68	Separation - 0.25 inch, 1 inch from moving parts
AD	Air Data System	Critical	WN	Wire - no limits		1.73	Separation - 0.25 inch, 1 inch from moving parts

[illegible][illegible]

DATE: 12/20/97

Report Number: DPM080R002 Report Name: Manufacturing Technology & substantiation Rev: C Date: 20-Dec-97

Technology report Position: Production engineer Name: Swayze Patrick Dept: 3481 Phone 4856

Part Number	Part Name	Technology	Chem Mill	Heat Treat	Shot Peen	LU	Pretreatment	Technical Notes
DPM2122101-011	Side skin panel, LH	4 axis					Chromic acid anodize	
DPM2122101-021	Side skin panel, LH	4 axis					Chromic acid anodize	
DPM2122201-001	Side skin, RH	Sheet stretching					Chromate conversion	
DPM2122201-011	Side skin panel, RH	4 axis					Chromic acid anodize	
DPM2122201-021	Side skin panel, RH	4 axis					Chromic acid anodize	
DPM2122201-031	Side skin panel, RH	4 axis					Chromic acid anodize	
DPM2122201-041	Side skin panel, RH	4 axis					Chromic acid anodize	
DPM2122301-001	Lower skin	Sheet stretching					Chromate conversion	
DPM2122401-001	Upper skin	Sheet stretching					Chromate conversion	
DPM2130011-001	Frame 3	5 axis					Chromic acid anodize	
DPM2130021-001	Frame 4 LH	Die press					Chromate conversion	
DPM2130021-002	Frame 4 RH	Die press					Chromate conversion	
DPM2130021-003	Frame 4 lower	Die press					Chromate conversion	
DPM2130031-001	Frame 5 LH	Die press					Chromate conversion	
DPM2130031-002	Frame 5 RH	Die press					Chromate conversion	
DPM2130031-003	Frame 5 lower	Die press					Chromate conversion	
DPM2130041-001	Frame 6 LH	Die press					Chromate conversion	
DPM2130041-002	Frame 6 RH	Die press					Chromate conversion	
DPM2130041-003	Frame 6 lower	Die press					Chromate conversion	
DPM2130041-004	Frame 6 upper	Die press					Chromate conversion	
DPM2130051-001	Frame 7 LH	Die press					Chromate conversion	
DPM2130051-002	Frame 7 RH	Die press					Chromate conversion	
DPM2130051-003	Frame 7 lower	Die press					Chromate conversion	
DPM2130051-004	Frame 7 upper	Die press					Chromate conversion	
DPM2130061-001	Frame 8 LH	Die press					Chromate conversion	
DPM2130061-002	Frame 8 RH	Die press					Chromate conversion	
DPM2130061-003	Frame 8 lower	Die press					Chromate conversion	
DPM2130061-004	Frame 8 upper	Die press					Chromate conversion	
DPM2131110-001	Lower longeron, LH	5 axis					Chromic acid anodize	
DPM2131110-002	Lower longeron, RH	5 axis					Chromic acid anodize	
DPM2131210-001	Upper longeron, LH	Die press					Chromate conversion	
DPM2131210-002	Upper longeron, RH	Die press					Chromate conversion	
DPM2132101-001	Side skin, LH	Sheet stretching					Chromate conversion	

Tools and jigs shop list

Part Number	Tool Function	Tool Name
HR403	Cutting Power Tool	Hydraulic Riveter
HR606	Cutting Tool	Half Round File
HR987	Cutting Tool	Hand Riveter
HS534	Cutting Tool	Honing Stone
HS707	Cutting Hand Tool	Hack Saw
HS847	Hand Shop Tool	Hand Sealing
HT374	Hand Shop Tool	Holder Tool
HT771	Hand Shop Tool	Helicoil Tool
KA846	Hand Shop Tool	Key Allen
KT487	Cutting Tool	Knurling Tool
MA384	Hand Shop Tool	Marker
MC837	Inspection Tool	Micrometer
MD103	Cutting Tool	Machine Die
MG743	Inspection Tool	Magnifying Glass
MJ362	Inspection Tool	Mating Jig
MM797	Cutting Tool	Machine Mandrel
MR678	Cutting Tool	Machine Reamer
ND241	Inspection Tool	Indicator
ND295	Hand Shop Tool	Nut Driver
NH389	Cutting Tool	Insert Holder
NT753	Hand Shop Tool	Insertion Tool
PB351	Hand Shop Tool	Paint Brush
PB736	Cutting Tool	Pipe Bender
PC635	Cutting Tool	Pipe Cutter
PD367	Hand Shop Tool	Phillips Socket Driver
PD749	Cutting Power Tool	Pneumatic Drill
PG327	Inspection Tool	Pressure Gauge
PG648	Cutting Power Tool	Power Grinder
PG984	Cutting Power Tool	Power Gun
PJ854	Cutting Power Tool	Pneumatic Jack
PL364	Hand Shop Tool	Plier
PN634	Hand Shop Tool	Pincer
PP673	Cutting Tool	Prick Punch
PP983	Cutting Tool	Pin Punch
PR362	Cutting Tool	Pulling Hand Riveter
PR546	Cutting Tool	Pipe Reamer
PR671	Cutting Power Tool	Power Router
PR842	Cutting Power Tool	Pneumatic Riveter
PS646	Cutting Power Tool	Power Screwdriver
PT661	Hand Shop Tool	Pick-up Tool
PT742	Cutting Power Tool	Power Impact Tool
PT881	Cutting Tool	Permaswage Tool
PU702	Cutting Tool	Punch
PV563	Cutting Tool	Pipe Vise
PW345	Cutting Tool	Pipe Wrench
RB947	Cutting Tool	Router Block
RC378	Hand Shop Tool	Ratchet
RC734	Cutting Tool	Router Cap
RC811	Cutting Tool	Round-nosed Chisel
RD635	Cutting Tool	Radial Drill Press

05-Jul-99

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Report Number: DPM074R001 Report Name: Toolings & Jigs Last revision: A Date: 14-Jun-98
 Name: Fisher Andy Position: Tooling designer Dept: 3454 Phone: 3220

Tools and Jigs for MRD Parts

Tool Part Number	Tool Part Name	Width	Length	Height	Tool Type	Tool Notes	Dwg Number	Part Number	Part Name	MRD	BLCG	STACG	WLCG
DPM0740000-501	Jig, Aircraft structure assy	831.5	862.1	231.0	Assy jig		DPM1200000	DPM1020000-501	Aircraft structure assy	A102A	0.00	545.70	39.80
DPM0741000-501	Jig, Wing assy, LH	288.8	363.6	16.0	Assy jig		DPM1100000	DPM1100000-501	Wing assy, LH	A110AL	163.40	503.50	16.80
DPM0741000-502	Jig, Wing assy, RH	288.8	363.6	16.0	Assy jig		DPM1100000	DPM1100000-502	Wing assy, RH	A110AR	163.40	503.50	16.80
DPM0741100-501	Jig, Wing torsion box assy	213.2	328.7	16.0	Assy jig		DPM1200000	DPM1200000-501	Wing torsion box assy, LH	A120AL	162.80	501.20	16.80
DPM0741100-502	Jig, Wing torsion box assy	213.2	328.7	16.0	Assy jig		DPM1200000	DPM1200000-502	Wing torsion box assy, RH	A120AR	162.80	501.20	16.80
DPM0741110-501	Jig, Fwd spar assy, LH	15.5	358.5	16.0	Assy jig		DPM1200010	DPM1200010-501	Fwd spar assy, LH	A120BFAL	199.00	478.00	12.80
DPM0741110-502	Jig, Fwd spar assy, RH	15.5	358.5	16.0	Assy jig		DPM1200010	DPM1200010-502	Fwd spar assy, RH	A120BFAR	199.00	478.00	12.80
DPM0741111-501	Jig, Fwd inboard spar, LH	4.5	121.5	16.0	Male tool		DPM1200011	DPM1200011-001	Fwd inboard spar, LH	A120BF1L	99.00	428.50	6.80
DPM0741111-502	Jig, Fwd inboard spar, RH	4.5	121.5	16.0	Male tool		DPM1200011	DPM1200011-002	Fwd inboard spar, RH	A120BF1R	99.00	428.50	6.80
DPM0741112-501	Jig, Fwd outboard spar, L	3.9	231.9	15.0	Female tool		DPM1200012	DPM1200012-001	Fwd outboard spar, LH	A120BF2L	253.00	488.50	22.00
DPM0741112-502	Jig, Fwd outboard spar, R	3.9	231.9	15.0	Female tool		DPM1200012	DPM1200012-002	Fwd outboard spar, RH	A120BF2R	253.00	488.50	22.00
DPM0741113-501	Jig, Splice, fwd spar	5.3	8.5	6.0	Inspection tool		DPM1200013	DPM1200013-001	Splice, fwd spar	A120BF3L	148.00	450.00	12.80
DPM0741113-502	Jig, Splice, fwd spar	5.3	8.5	6.0	Inspection tool		DPM1200013	DPM1200013-002	Splice, fwd spar	A120BF3R	148.00	450.00	12.80
DPM0741120-501	Jig, Rear spar assy, LH	24.8	348.4	16.0	Assy jig		DPM1200020	DPM1200020-501	Rear spar assy, LH	A120BRAL	199.00	550.50	12.80
DPM0741120-502	Jig, Rear spar assy, RH	24.8	348.4	16.0	Assy jig		DPM1200020	DPM1200020-502	Rear spar assy, RH	A120BRAFL	199.00	550.50	12.80
DPM0741121-501	Jig, Rear inboard spar, L	4.5	114.0	16.0	Male tool		DPM1200021	DPM1200021-001	Rear inboard spar, LH	A120BR1L	99.00	502.50	6.80
DPM0741121-502	Jig, Rear inboard spar, R	4.5	114.0	16.0	Male tool		DPM1200021	DPM1200021-002	Rear inboard spar, RH	A120BR1R	99.00	502.50	6.80
DPM0741122-501	Jig, Rear outboard spar, L	3.9	238.6	15.0	Female tool		DPM1200022	DPM1200022-001	Rear outboard spar, LH	A120BR2L	253.00	558.00	22.00
DPM0741122-502	Jig, Rear outboard spar, R	3.9	238.6	15.0	Female tool		DPM1200022	DPM1200022-002	Rear outboard spar, RH	A120BR2R	253.00	558.00	22.00
DPM0741123-501	Jig, Splice, aft spar	5.3	8.4	6.0	Inspection tool		DPM1200023	DPM1200023-001	Splice, aft spar	A120BR3L	148.00	510.00	12.80
DPM0741123-502	Jig, Splice, aft spar	5.3	8.4	6.0	Inspection tool		DPM1200023	DPM1200023-002	Splice, aft spar	A120BR3R	148.00	510.00	12.80
DPM0741130-501	Jig, Rear auxiliary spar assy	4.5	113.4	16.0	Assy jig		DPM1200030	DPM1200030-501	Rear auxiliary spar assy, LH	A120B30L	99.00	502.50	6.80
DPM0741130-502	Jig, Rear auxiliary spar assy	4.5	113.4	16.0	Assy jig		DPM1200030	DPM1200030-502	Rear auxiliary spar assy, RH	A120B30R	99.00	502.50	6.80
DPM0741131-501	Jig, Rear auxiliary spar, L	4.5	113.4	16.0	Male tool		DPM1200031	DPM1200031-001	Rear auxiliary spar, LH	A120B31L	99.00	502.50	6.80
DPM0741131-502	Jig, Rear auxiliary spar, R	4.5	113.4	16.0	Male tool		DPM1200031	DPM1200031-002	Rear auxiliary spar, RH	A120B31R	99.00	502.50	6.80
DPM0741140-501	Jig, MLG aft spar assy, L	22.4	37.7	3.0	Assy jig		DPM1200040	DPM1200040-501	MLG aft spar assy, LH	A120B40L	59.00	534.50	9.30
DPM0741140-502	Jig, MLG aft spar assy, R	22.4	37.7	3.0	Assy jig		DPM1200040	DPM1200040-502	MLG aft spar assy, RH	A120B40R	59.00	534.50	9.30
DPM0741141-501	Jig, MLG aft spar, LH	22.4	37.9	3.0	Male tool		DPM1200041	DPM1200041-001	MLG aft spar, LH	A120B41L	59.00	534.50	9.30
DPM0741141-502	Jig, MLG aft spar, RH	22.4	37.9	3.0	Male tool		DPM1200041	DPM1200041-002	MLG aft spar, RH	A120B41R	59.00	534.50	9.30
DPM0741150-501	Jig, Spar 1, LH	3.4	85.6	15.0	Female tool		DPM1200050	DPM1200050-001	Spar 1, LH	A120B01L	58.00	531.50	9.80
DPM0741150-502	Jig, Spar 1, RH	3.4	85.6	15.0	Female tool		DPM1200050	DPM1200050-002	Spar 1, RH	A120B01R	58.00	531.50	9.80

Report Number: DPM001R003 Report Name: Work breakdown structure (WBS) report Rev: B Date: 29-Mar-98
 Project Engineer Name: Orange Sara Position: Project engineer Dept: 2210 Phone: 6488

Work Building Structure WBS

Eng	Engineer Name	Position	WBS	Work Description
16	Orange Sara	Project configuration engineer	1200	Configuration Management
14	Porter Tom	Project maintainability engineer	2400	Maintainability Program
14	Porter Tom	Project maintainability engineer	2400	Maintainability Program
14	Porter Tom	Project maintainability engineer	2400	Maintainability Program
14	Porter Tom	Project maintainability engineer	2400	Maintainability Program
14	Porter Tom	Project maintainability engineer	2500	Reliability Program
14	Porter Tom	Project maintainability engineer	2500	Reliability Program
14	Porter Tom	Project maintainability engineer	2500	Reliability Program
2	Ford John	Project design assist. manager	10000	Air Vehicle
2	Ford John	Project design assist. manager	10000	Air Vehicle
100	Dart Derick	Structure department manager	11000	Airframe Structure
100	Dart Derick	Structure department manager	11000	Airframe Structure
100	Dart Derick	Structure department manager	11000	Airframe Structure
100	Dart Derick	Structure department manager	11000	Airframe Structure
100	Dart Derick	Structure department manager	11000	Airframe Structure
100	Dart Derick	Structure department manager	11000	Airframe Structure
110	Westwind Peter	Wing structure manager	11100	Wing
120	Dole Tony	Wing torsion box structure leader	11110	Wing Torsion Box
121	Dole Tony	Wing inb'd fuel tank str. engineer	11111	Wing Inboard Fuel Tank
122	Dole Tony	Wing outb'd fuel tank str. engineer	11112	Wing Outboard Fuel Tank
123	Dole Tony	Wing dry tip structure engineer	11113	Wing Tip Dry Area
124	Plenel Edwy	Winglet structure engineer	11114	Winglet
130	Tisson Jan	Wing leading edge leader	11120	Wing Leading Edge
131	Shirak Michael	Wing slats structure engineer	11121	Control Surface Slat
132	Shirman Jannet	Wing krueger structure engineer	11122	Control Surface Krueger
140	Young Sam	Wing trailing edge leader	11130	Wing Trailing Edge
141	Sanderson Terry	Wing flaps structure engineer	11131	Control Surface Inboard Flap
141	Sanderson Terry	Wing flaps structure engineer	11132	Control Surface Outboard Flap
142	Moor Kathleen	Wing ailerons struct. engineer	11133	Control Surface Aileron
200	Garrison Fred	Fuselage structure manager	11200	Fuselage
210	Gingrich Paul	Fus. nose structure manager	11210	Fuselage Nose Section
211	Mitchell Robert	Radome structure engineer	11211	Radome
212	Baker Mary	Nose structure engineer	11212	Nose
213	Wellington Barry	Cockpit structure engineer	11213	Cockpit
220	Nagorski Ralph	Fus. cabin structure manager	11220	Fuselage Passenger Section
221	Fineman Howard	Fwd pass. cabin struct. engineer	11221	Fwd Passenger Cabin
222	Kennedy Brian	Main pass. cabin struct. engineer	11222	Main Passenger Cabin
223	Teflon Mike	Centre-wing box struct. engineer	11223	Aft Passenger Cabin
224	Whitewater Jerry	Aft pass. cabin struct. engineer	11224	Centre-wing Box Structure
230	Bonior David	Fus. aft section struct. manager	11230	Fuselage Aft Section
231	Jost Steve	Baggage bay struct. engineer	11231	Baggage Compartment
232	Worley David	Service bay structure engineer	11232	Service Compartment
233	Baron Francis	Aft fuel tank bay struct. engineer	11233	Aft Fuel Tank Bay
234	Winston Daniel	Engine pylon structure engineer	11234	APU Compartment
235	Winston Daniel	Engine nacelle structure engineer	11235	Engine pylon structure
200	Garrison Fred	Fuselage structure manager	11240	Spec Preparation and Vendors Evaluation
200	Garrison Fred	Fuselage structure manager	11250	Fuselage Engineering & Integration
300	Massor Claude	Empennage structure manager	11300	Empennage
310	Yun Cyrus	Vertical stabilizer struct engineer	11310	Vertical Stabilizer
320	Padget Marc	Rudder structure engineer	11320	Control Surface Rudder
330	Bautista Romeo	Horizontal stabilizer str. engineer	11330	Horizontal Stabilizer

02-Jul-99

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WBS

Eng	WBS	WorkDescription
2	0	Aircraft Program
2	1000	Program Management
2	1100	Program Planning & Control
2	1110	Program Definition
2	1120	Program GANT & PERT Schedules
2	1130	Program Contract & Subcontract
2	1140	Program Liason
2	1150	Cost Planning & Control
16	1200	Configuration Management
16	1210	Configuration Identification & Accountability
16	1220	Configuration Change Control
16	1300	Data Management
2	2000	Project Effectiveness Program
2	2100	Human Engineering
2	2200	Safety Engineering
2	2300	Value Engineering
14	2400	Maintainability Program
14	2500	Reliability Program
2	10000	Air Vehicle
100	11000	Airframe Structure
110	11100	Wing
120	11110	Wing Torsion Box
121	11111	Wing Inboard Fuel Tank
122	11112	Wing Outboard Fuel Tank
123	11113	Wing Tip Dry Area
124	11114	Winglet
130	11120	Wing Leading Edge
131	11121	Control Surface Slat
132	11122	Control Surface Krueger
140	11130	Wing Trailing Edge
141	11131	Control Surface Inboard Flap
141	11132	Control Surface Outboard Flap
142	11133	Control Surface Aileron
143	11134	Control Surface Airbrake 1
143	11135	Control Surface Airbrake 2
143	11136	Control Surface Airbrake 3
110	11140	Spec Preparation and Vendors Evaluation
110	11150	Wing Engineering & Integration
200	11200	Fuselage
210	11210	Fuselage Nose Section
211	11211	Radome
212	11212	Nose
213	11213	Cockpit
220	11220	Fuselage Passenger Section
221	11221	Fwd Passenger Cabin
222	11222	Main Passenger Cabin
223	11223	Aft Passenger Cabin
224	11224	Centre-wing Box Structure
230	11230	Fuselage Aft Section
231	11231	Baggage Compartment
232	11232	Service Compartment
233	11233	Aft Fuel Tank Bay
234	11234	APU Compartment

Properties

Date Created:	4/26/98 9:50:09 PM	Def. Updatable:	False
Last Updated:	3/26/99 9:33:38 PM	OrderByOn:	False
Orientation:	0	RecordCount:	6473

Columns

Name	Type	Size
AI	Number (Long)	4
AllowZeroLength:	False	
Attributes:	Fixed Size	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	Default	
ColumnWidth:	570	
Decimal Places:	Auto	
Default Value:	0	
Description:	Action Items number	
DisplayControl:	Text Box	
Ordinal Position:	1	
Required:	False	
Source Field:	AI	
Source Table:	Action answer	
Item	Number (Long)	4
AllowZeroLength:	False	
Attributes:	Fixed Size	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	Default	
ColumnWidth:	570	
Decimal Places:	Auto	
Default Value:	0	
Description:	Item	
DisplayControl:	Text Box	
Ordinal Position:	2	
Required:	False	
Source Field:	Item	
Source Table:	Action answer	
PartNumber	Text	50
AllowZeroLength:	False	
Attributes:	Variable Length	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	Default	
ColumnWidth:	1695	
Description:	Part Number	
DisplayControl:	Text Box	
Ordinal Position:	3	
Required:	False	
Source Field:	PartNumber	
Source Table:	Action answer	

MRD	AllowZeroLength: False Attributes: Variable Length Collating Order: General ColumnHidden: False ColumnOrder: Default ColumnWidth: 1005 Description: Map Reference Designator DisplayControl: Text Box Ordinal Position: 4 Required: False Source Field: MRD Source Table: Action answer	Text	14
Eff	AllowZeroLength: False Attributes: Fixed Size Collating Order: General ColumnHidden: False ColumnOrder: Default ColumnWidth: 390 Decimal Places: Auto Default Value: 0 Description: Aircraft effectivity DisplayControl: Text Box Ordinal Position: 5 Required: False Source Field: Eff Source Table: Action answer	Number (Long)	4
Question	AllowZeroLength: False Attributes: Variable Length Collating Order: General ColumnHidden: False ColumnOrder: Default ColumnWidth: 2775 Description: Question DisplayControl: Text Box Ordinal Position: 6 Required: False Source Field: Question Source Table: Action answer	Text	255
Answer	AllowZeroLength: False Attributes: Variable Length Collating Order: General ColumnHidden: False ColumnOrder: Default ColumnWidth: 2730 Description: Answer DisplayControl: Text Box Ordinal Position: 7 Required: False Source Field: Answer Source Table: Action answer	Text	255

Relationships

Action itemsAction answer

Action items	Action answer
AI	1 ∞ AI
Attributes:	Enforced
Attributes:	One-To-Many

MRDAction answer

MRD	Action answer
MRD	1 ∞ MRD
Attributes:	Enforced
Attributes:	One-To-Many

PartsAction answer

Parts	Action answer
PartNumber	1 ∞ PartNumber
Attributes:	Enforced
Attributes:	One-To-Many

Table Indexes

Name	Number of Fields
Action itemsAction answer	1
Clustered:	False
Distinct Count:	2180
Foreign:	True
Ignore Nulls:	False
Name:	Action itemsAction answer
Primary:	False
Required:	False
Unique:	False
Fields:	AI, Ascending
MRD	1
Clustered:	False
Distinct Count:	4289
Foreign:	False
Ignore Nulls:	False
Name:	MRD
Primary:	False
Required:	False

Unique:	False
Fields:	MRD, Ascending
MRDAction answer	1
Clustered:	False
Distinct Count:	4289
Foreign:	True
Ignore Nulls:	False
Name:	MRDAction answer
Primary:	False
Required:	False
Unique:	False
Fields:	MRD, Ascending
PartNumber	1
Clustered:	False
Distinct Count:	3260
Foreign:	False
Ignore Nulls:	False
Name:	PartNumber
Primary:	False
Required:	False
Unique:	False
Fields:	PartNumber, Ascending
PartsAction answer	1
Clustered:	False
Distinct Count:	3260
Foreign:	True
Ignore Nulls:	False
Name:	PartsAction answer
Primary:	False
Required:	False
Unique:	False
Fields:	PartNumber, Ascending
PrimaryKey	2
Clustered:	False
Distinct Count:	6473
Foreign:	False
Ignore Nulls:	False
Name:	PrimaryKey
Primary:	True
Required:	True
Unique:	True
Fields:	AI, Ascending Item, Ascending

User Permissions

admin

Group Permissions

Admins

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Users

Page: 5

Properties

Date Created:	4/26/98 9:44:59 PM	Def. Updatable:	False
Last Updated:	8/19/98 5:03:23 PM	OrderByOn:	False
Orientation:	0	RecordCount:	2180

Columns

Name	Type	Size
AI	Number (Long)	4
AllowZeroLength:	False	
Attributes:	Fixed Size, Auto-Increment	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	Default	
ColumnWidth:	570	
Description:	Action Items Number	
Ordinal Position:	1	
Required:	False	
Source Field:	AI	
Source Table:	Action items	
DwgNumber	Text	50
AllowZeroLength:	False	
Attributes:	Variable Length	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	Default	
ColumnWidth:	1320	
Description:	Drawing Number	
DisplayControl:	Text Box	
Ordinal Position:	2	
Required:	True	
Source Field:	DwgNumber	
Source Table:	Action items	
QEng	Number (Long)	4
AllowZeroLength:	False	
Attributes:	Fixed Size	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	Default	
ColumnWidth:	660	
Decimal Places:	Auto	
Default Value:	0	
Description:	Question Engineer	
DisplayControl:	Text Box	
Ordinal Position:	3	
Required:	False	
Source Field:	QEng	
Source Table:	Action items	
AEng	Number (Long)	4
AllowZeroLength:	False	

Attributes: Fixed Size
Collating Order: General
ColumnHidden: False
ColumnOrder: Default
ColumnWidth: 645
Decimal Places: Auto
Default Value: 0
Description: Answer Engineer
DisplayControl: Text Box
Ordinal Position: 4
Required: False
Source Field: AEng
Source Table: Action Items

NDate Date/Time 8

AllowZeroLength: False
Attributes: Fixed Size
Collating Order: General
ColumnHidden: False
ColumnOrder: Default
ColumnWidth: 1065
Description: Question Date
Format: Medium Date
Ordinal Position: 5
Required: False
Source Field: NDate
Source Table: Action Items

QDate Date/Time 8

AllowZeroLength: False
Attributes: Fixed Size
Collating Order: General
ColumnHidden: False
ColumnOrder: Default
ColumnWidth: 1065
Description: Question Date
Format: Medium Date
Ordinal Position: 6
Required: False
Source Field: QDate
Source Table: Action Items

ADate Date/Time 8

AllowZeroLength: False
Attributes: Fixed Size
Collating Order: General
ColumnHidden: False
ColumnOrder: Default
ColumnWidth: 990
Description: Answer Date
Format: Medium Date
Ordinal Position: 7
Required: False
Source Field: ADate
Source Table: Action Items

Designer Number (Long) 4

AllowZeroLength:	False
Attributes:	Fixed Size
Collating Order:	General
ColumnHidden:	False
ColumnOrder:	Default
ColumnWidth:	990
Decimal Places:	Auto
Default Value:	0
Description:	Designer ID
DisplayControl:	Text Box
Ordinal Position:	8
Required:	False
Source Field:	Designer
Source Table:	Action items

Relationships

Action itemsAction answer

Action items	Action answer
AI	1 ∞ AI
Attributes:	Enforced
Attributes:	One-To-Many

Table Indexes

Name	Number of Fields
AEng	1
Clustered:	False
Distinct Count:	115
Foreign:	False
Ignore Nulls:	False
Name:	AEng
Primary:	False
Required:	False
Unique:	False
Fields:	AEng, Ascending
Designer	1
Clustered:	False
Distinct Count:	248
Foreign:	False
Ignore Nulls:	False
Name:	Designer
Primary:	False
Required:	False
Unique:	False
Fields:	Designer, Ascending
DwgNumber	1
Clustered:	False
Distinct Count:	2006
Foreign:	False

Ignore Nulls:	False
Name:	DwgNumber
Primary:	False
Required:	False
Unique:	False
Fields:	DwgNumber, Ascending
PrimaryKey	1
Clustered:	False
Distinct Count:	2180
Foreign:	False
Ignore Nulls:	False
Name:	PrimaryKey
Primary:	True
Required:	True
Unique:	True
Fields:	AI, Ascending
QEng	1
Clustered:	False
Distinct Count:	11
Foreign:	False
Ignore Nulls:	False
Name:	QEng
Primary:	False
Required:	False
Unique:	False
Fields:	QEng, Ascending

User Permissions

admin

Group Permissions

Admins
Users

Properties

Date Created:	3/29/99 5:10:42 PM	Def. Updatable:	False
Last Updated:	3/29/99 5:14:11 PM	OrderByOn:	True
Orientation:	0	RecordCount:	794

Columns

Name	Type	Size
M	Text	50
AllowZeroLength: False Attributes: Variable Length Collating Order: General ColumnHidden: False ColumnOrder: Default ColumnWidth: Default Description: Map Reference Designator (tube only) DisplayControl: Text Box Ordinal Position: 1 Required: False Source Field: M Source Table: AM		
MRD	Text	50
AllowZeroLength: False Attributes: Variable Length Collating Order: General ColumnHidden: False ColumnOrder: Default ColumnWidth: 1050 Description: Map Reference Designator DisplayControl: Text Box Ordinal Position: 2 Required: False Source Field: MRD Source Table: AM		
PartNumber	Text	50
AllowZeroLength: False Attributes: Variable Length Collating Order: General ColumnHidden: False ColumnOrder: Default ColumnWidth: 1695 Description: Part Number DisplayControl: Text Box Ordinal Position: 3 Required: False Source Field: PartNumber Source Table: AM		
PartName	Text	50
AllowZeroLength: False Attributes: Variable Length		

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C:\WINDOWS\DESKTOP\DPM.mdb
Table: AM

Collating Order:	General
ColumnHidden:	False
ColumnOrder:	Default
ColumnWidth:	2655
Description:	Part Name
DisplayControl:	Text Box
Ordinal Position:	4
Required:	False
Source Field:	PartName
Source Table:	AM

Text

50

T

AllowZeroLength:	False
Attributes:	Variable Length
Collating Order:	General
ColumnHidden:	False
ColumnOrder:	Default
ColumnWidth:	450
Description:	Type
DisplayControl:	Text Box
Ordinal Position:	5
Required:	False
Source Field:	T
Source Table:	AM

Table Indexes

Name	Number of Fields
PrimaryKey	1
Clustered:	False
Distinct Count:	794
Foreign:	False
Ignore Nulls:	False
Name:	PrimaryKey
Primary:	True
Required:	True
Unique:	True
Fields:	PartNumber, Ascending

User Permissions

admin

Group Permissions

Admins
Users

Properties

Date Created:	3/22/99 10:35:24 PM	Def. Updatable:	False
Last Updated:	3/30/99 11:30:55 PM	OrderByOn:	False
Orientation:	0	RecordCount:	1833

Columns

Name	Type	Size
AMO	Text	50
AllowZeroLength: False Attributes: Variable Length Collating Order: General ColumnHidden: False ColumnOrder: Default ColumnWidth: 1155 Description: Advanced Material Order number DisplayControl: Text Box Ordinal Position: 1 Required: False Source Field: AMO Source Table: AMO		
MRD	Text	50
AllowZeroLength: False Attributes: Variable Length Collating Order: General ColumnHidden: False ColumnOrder: Default ColumnWidth: Default Description: Map Reference Designator (tube) DisplayControl: Text Box Ordinal Position: 2 Required: False Source Field: MRD Source Table: AMO		
PartNumber	Text	50
AllowZeroLength: False Attributes: Variable Length Collating Order: General ColumnHidden: False ColumnOrder: Default ColumnWidth: 1695 Description: Part Number DisplayControl: Text Box Ordinal Position: 3 Required: False Source Field: PartNumber Source Table: AMO		
PartName	Text	50
AllowZeroLength: False Attributes: Variable Length		

OBJECTS

	Collating Order:	General		
	ColumnHidden:	False		
	ColumnOrder:	Default		
	ColumnWidth:	2655		
	Description:	Part Name		
	DisplayControl:	Text Box		
	Ordinal Position:	4		
	Required:	False		
	Source Field:	PartName		
	Source Table:	AMO		
T			Text	50
	AllowZeroLength:	False		
	Attributes:	Variable Length		
	Collating Order:	General		
	ColumnHidden:	False		
	ColumnOrder:	Default		
	ColumnWidth:	450		
	Description:	Type		
	DisplayControl:	Text Box		
	Ordinal Position:	5		
	Required:	False		
	Source Field:	T		
	Source Table:	AMO		
Width			Number (Double)	8
	AllowZeroLength:	False		
	Attributes:	Fixed Size		
	Collating Order:	General		
	ColumnHidden:	False		
	ColumnOrder:	Default		
	ColumnWidth:	705		
	Decimal Places:	3		
	Default Value:	0		
	Description:	Width in inch		
	DisplayControl:	Text Box		
	Format:	Fixed		
	Ordinal Position:	6		
	Required:	False		
	Source Field:	Width		
	Source Table:	AMO		
Length			Number (Double)	8
	AllowZeroLength:	False		
	Attributes:	Fixed Size		
	Collating Order:	General		
	ColumnHidden:	False		
	ColumnOrder:	Default		
	ColumnWidth:	810		
	Decimal Places:	3		
	Default Value:	0		
	Description:	Length in inch		
	DisplayControl:	Text Box		
	Format:	Fixed		
	Ordinal Position:	7		
	Required:	False		
	Source Field:	Length		

Source Table:		AMO	
Height	AllowZeroLength: Attributes: Collating Order: ColumnHidden: ColumnOrder: ColumnWidth: Decimal Places: Default Value: Description: DisplayControl: Format: Ordinal Position: Required: Source Field: Source Table:	False Fixed Size General False Default 765 3 0 Height in inch Text Box Fixed 8 False Height AMO	Number (Double) 8
Diameter	AllowZeroLength: Attributes: Collating Order: ColumnHidden: ColumnOrder: ColumnWidth: Decimal Places: Default Value: Description: DisplayControl: Format: Ordinal Position: Required: Source Field: Source Table:	False Fixed Size General False Default 735 3 0 Diameter in inch Text Box Fixed 9 False Diameter AMO	Number (Double) 8
Thickness	AllowZeroLength: Attributes: Collating Order: ColumnHidden: ColumnOrder: ColumnWidth: Decimal Places: Default Value: Description: DisplayControl: Format: Ordinal Position: Required: Source Field: Source Table:	False Fixed Size General False Default 705 3 0 Thickness in inch Text Box Fixed 10 False Thickness AMO	Number (Double) 8
Material	AllowZeroLength: Attributes: Collating Order:	False Variable Length General	Text 50

ColumnHidden: False
ColumnOrder: Default
ColumnWidth: 1440
Description: Material
DisplayControl: Text Box
Ordinal Position: 11
Required: False
Source Field: Material
Source Table: AMO

Weight Number (Double) 8

AllowZeroLength: False
Attributes: Fixed Size
Collating Order: General
ColumnHidden: False
ColumnOrder: Default
ColumnWidth: 945
Decimal Places: 3
Default Value: 0
Description: Weight in lb
DisplayControl: Text Box
Format: Fixed
Ordinal Position: 12
Required: False
Source Field: Weight
Source Table: AMO

W Number (Long) 4

AllowZeroLength: False
Attributes: Fixed Size
Collating Order: General
ColumnHidden: False
ColumnOrder: Default
ColumnWidth: 660
Decimal Places: Auto
Default Value: 0
Description: AMO Width in inch
DisplayControl: Text Box
Ordinal Position: 13
Required: False
Source Field: W
Source Table: AMO

L Number (Long) 4

AllowZeroLength: False
Attributes: Fixed Size
Collating Order: General
ColumnHidden: False
ColumnOrder: Default
ColumnWidth: 615
Decimal Places: Auto
Default Value: 0
Description: AMO Length in inch
DisplayControl: Text Box
Ordinal Position: 14
Required: False
Source Field: L

Source Table:		AMO		
AMODescription			Text	255
AllowZeroLength:	False			
Attributes:	Variable Length			
Collating Order:	General			
ColumnHidden:	False			
ColumnOrder:	Default			
ColumnWidth:	1665			
Description:	AMO Description			
DisplayControl:	Text Box			
Ordinal Position:	15			
Required:	False			
Source Field:	AMODescription			
Source Table:	AMO			
Date			Date/Time	8
AllowZeroLength:	False			
Attributes:	Fixed Size			
Collating Order:	General			
ColumnHidden:	False			
ColumnOrder:	Default			
ColumnWidth:	1020			
Format:	Medium Date			
Ordinal Position:	16			
Required:	False			
Source Field:	Date			
Source Table:	AMO			
N			Number (Long)	4
AllowZeroLength:	False			
Attributes:	Fixed Size			
Collating Order:	General			
ColumnHidden:	False			
ColumnOrder:	Default			
ColumnWidth:	285			
Decimal Places:	Auto			
Default Value:	0			
DisplayControl:	Text Box			
Ordinal Position:	17			
Required:	False			
Source Field:	N			
Source Table:	AMO			
Design Criteria			Text	225
AllowZeroLength:	False			
Attributes:	Variable Length			
Collating Order:	General			
ColumnHidden:	False			
ColumnOrder:	Default			
ColumnWidth:	2430			
DisplayControl:	Text Box			
Ordinal Position:	18			
Required:	False			
Source Field:	Design Criteria			
Source Table:	AMO			

C:\WINDOWS\DESKTOP\DPM.mdb
Table: AMO

RepNUM	AllowZeroLength: Attributes: Collating Order: ColumnHidden: ColumnOrder: ColumnWidth: DisplayControl: Ordinal Position: Required: Source Field: Source Table:	False Variable Length General False Default 975 Text Box 19 False RepNUM AMO	Text	50
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Prod1	AllowZeroLength: Attributes: Collating Order: ColumnHidden: ColumnOrder: ColumnWidth: DisplayControl: Ordinal Position: Required: Source Field: Source Table:	False Variable Length General False Default Default Text Box 20 False Prod1 AMO	Text	50
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Prod2	AllowZeroLength: Attributes: Collating Order: ColumnHidden: ColumnOrder: ColumnWidth: DisplayControl: Ordinal Position: Required: Source Field: Source Table:	False Variable Length General False Default Default Text Box 21 False Prod2 AMO	Text	50
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Table Indexes

Name	Number of Fields
PrimaryKey	3
Clustered:	False
Distinct Count:	1833
Foreign:	False
Ignore Nulls:	False
Name:	PrimaryKey
Primary:	True
Required:	True
Unique:	MRD, Ascending
Fields:	AMO, Ascending
	PartNumber, Ascending
RepNUM	1

A-17

C:\WINDOWS\DESKTOP\DPM.mdb
Table: AMO

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Clustered:	False
Distinct Count:	1
Foreign:	False
Ignore Nulls:	False
Name:	RepNUM
Primary:	False
Required:	False
Unique:	False
Fields:	RepNUM, Ascending

User Permissions

admin

Group Permissions

Admins
Users

[illegible]

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